The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1569.—Vol. XXXV. LONDON, SATURDAY, SEPTEMBER 16, 1865. {STAMPED.....SIXPENCE. UNSTAMPED..FIVEPENCE.

Mining Exchange, London.

MINING EXCHANGE, LONDON.—With a view of correcting the evil resulting from parties advertising mining shares at fixed prices and declining to deliver the same, of which frequent complaints have been brought before the Committee, at a meeting of the members, held on Tuesday, the 10th inst., the following resolution was passed, and is in operation from this date:—

"That no MEMBER of the MINING EXCHANGE shall be allowed, directly or indirectly to advertise shares at fixed prices, under pain of suspension."

Mining Exchange, London, July 18, 1865. W. E. JOHNSON, Sec.

MR. JAMES CROFTS, SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)

MR. CROFTS offers the FOLLOWING SHARES FOR SALE and IMMEDIATE DELIVERY, all calls paid, and net money:—3 Great Laxey, £22; 15 Bryntail, 15s.; 50 Hogan, 6s. 6d.; 30 East Rosewarne, £2 11s. 3d.; 38 North Robert, 5s. 6d.; 30 Wh. Harriett, 4s. 9d.; 3 Clifford, £19¼; 10 Chiverton, £8⅜; 65 Bedol-Aur, 12s. 6d.; 30 Rosewarne Consols, 12s. 9d.; 50 Grylls Florence, an offer; 20 East Carn Brea, £8; 25 Wheal Edward, 6s. 6d.; 50 Tolvadden, 8s. 6d.; 50 North Dolcoath, 9s. 6d.; 10 Trewartha, 32s. 6d.; 2 West Stray Park, 11s.; 5 Tolcarne, 13s.; 2 East Basset, £27; 25 Prosper United, 26s. 6d.; 20 Wheal Hearle, 1s. 3d.; 50 North Minera, 5s. 6d.

*** SHARES AT NOMINAL VALUES negociated in exchange for stocks of undoubted merit, dividend or progressive, and ADVICE given as to the disposal of worthless mining or other shares. 2

MR. JAMES LANE, No. 44, THREADNEEDLE STREET,
LONDON, E.C.

JAMES LANE has FOR SALE at nett prices:—2 Basset and Grylls, £8¼; 5 Buller; 20 Carn Camborne, 23s. 3d.; 10 Chiverton, £8¾; 20 Dale, 5s. 6d.; 20 East Lovell; 20 Drake Walls, 14s.; 20 East Russell, £3¼; 50 East Jane, 9s.; 10 East Caradon, £13¼; 10 East Carn Brea, £6½; 30 East Rosewarne, £2⅞; 10 Frank Mills, £6¾; 25 Frontino and Bolivia; 20 Great North Downs, 37s. 6d.; 40 Great Busy, £3¾; 50 Great North Laxey, 35s.; 5 Great Vor, £36; 30 Grylls Wheal Florence, 5s. 6d.; 20 Hallenbeagle, £2½; 15 Ludcott, 8s. 6d.; 50 Lady Bertha, 10s. 6d.; 8 Long Rake, 10s. 6d.; 20 Marke Valley, £3¾; 50 New Martha, 17s. 6d.; 20 North Treskerby, £3½; 80 North Jane, 8s.; 25 Prosper United, 38s.; 10 Port Phillip, 26s.; 150 Prince of Wales, 1s. 6d.; 20 Rosewarne Consols, 16s.; 25 South Lovell, £2¼; 20 Tolvadden, 10s. 6d.; 10 Trencrom, £3¾; 150 Vale of Towy, 1s. 8d. 3

MR. WILLIAM LELEAN (Member of the Mining Exchange), has FOR SALE the FOLLOWING SHARES:—

50 Bedol-Aur.	5 Great Vor.	20 Snaefell.
40 Bottle Hill.	50 Great So. Chiverton.	30 South Condurrow.
25 Camborne Vean.	10 Great Busy.	20 South Darren.
1 Condurrow.	10 Hingston Down.	5 Stray Park.
5 Clifford Amalgamated.	5 Hallenbeagle.	25 Tolvadden.
20 East Carn Brea.	90 Lady Bertha.	5 West Caradon.
25 East Grenville.	5 Mary Ann.	1 Wheal Basset.
25 East Rosewarne.	15 North Crofty.	50 Wheal Unity.
20 East Russell.	5 North Treskerby.	50 Wheal Crebor.
5 East Caradon.	50 North Basset.	30 Wheal Grenville.
10 East Lovell.	20 North Shepherds.	2 West Chiverton.
25 East Providence.	5 North Roskear.	5 Wheal Buller.
15 Fowey Consols.	100 North Minera.	5 Wheal Trelawny.
10 Frank Mills.	10 North Chiverton.	5 Wheal Chiverton.
10 Great Laxey.	2 Providence.	15 West Basset.
40 Great North Laxey.	20 Rosewarne United.	60 Wheal Edward.
40 Gonamena.	25 Rosewarne Consols.	1 Wheal Seton.

WANTED TO PURCHASE:—Great Laxey (old and new shares), Reinnie Laxey, Snaefell, North Basset, Chiverton, West Chiverton, and Great North Laxey.

MR. LELEAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER, and parties may rely upon him for sound advice and punctuality in all his engagements.

MR. LELEAN refers his correspondents to his remarks in p. 600 of this day's Journal.

N.B.—SPECIALLY RECOMMENDED, the immediate purchase of Great Laxey, Reinnie Laxey, Rosewarne Consols, Maudlin, Great South Chiverton, West Chiverton, Wheal Chiverton, North Minera, North Basset, and Snaefell.

Bankers: Messrs. Roberts, Lubbock, and Co.

Offices, 11, Royal Exchange, London, E.C. 4

MR. WILLIAM LELEAN'S STOCK, SHARE, AND FINANCE REGISTER (Sept. number will be published on Tuesday, the 19th inst.), should be consulted by all who wish to make safe and profitable investments, giving from 10 to 15 per cent., or to review the state of the market for the preceding 30 days. Single copies, 6d. each; annual subscription, 5s. Published monthly. 11, Royal Exchange, E.C. 5

WILLIAM SEWARD,
19, THROGMORTON STREET, LONDON, E.C. 6

WILLIAM WARD,
29, THREADNEEDLE STREET, LONDON, E.C.
Is a BUYER of Wheal Lovell shares. Sellers to state number and lowest price. 7

JOHN GREEN, MINING OFFICES,
9, GRACECHURCH STREET, LONDON, E.C.
ESTABLISHED SIX YEARS. 8

NOTICE OF REMOVAL.

MESSRS. WARD AND JACKMAN,
STOCK AND SHAREDEALERS, have REMOVED from 2, Adam's-court to No. 1, CUSHION COURT, OLD BROAD STREET, CITY, E.C. 9
Members of the Mining Exchange.—Bankers: London and Westminster, Lothbury.

GEORGE RICE, SHAREDEALER, 5, COWPER'S COURT,
BIRCHIN LANE, LONDON (23 years' experience), Member of the Mining Exchange, DEALS in MINING SHARES at close prices, as BUYER or SELLER.

	Latest prices.		Latest prices.
Chiverton	£ 8 – £ 8¼	Hingston	£ 4 – £ 4¼
Clifford Amalgamated	18 – 18¼	Lady Bertha	10s 6d– 12s.
East Carn Brea	5⅝– 5¾	Marke Valley	4 – 4⅛
East Grenville	2½– 2⅝	North Treskerby	2⅛– 2⅜
East Caradon	11⅞– 11⅞	South Condurrow	3⅛– 3⅜
East Basset	25½– 26⅛	Wheal Crebor	29s. – 31s.
East Wheal Lovell	14 – 14¼	Wheal Grenville	2⅝– 2¾
Great Wheal Vor	35 – 35½	West Chiverton	70 – 72½

GEORGE RICE having recently returned from the mining districts of Cornwall and Devon, is well prepared to advise his clients and the public what shares to buy or sell. Money advanced on mining shares.

Sept. 15, 1865. Bankers: Bank of London. 10

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,
BISHOPSGATE STREET, LONDON, E.C. (Established 11 years), has FOR SALE the FOLLOWING SHARES, at nett prices:—

75 Godolphin Hill, 24s.	30 Wheal Union, 5s.	100 Gt. So. Chiverton, 5s.
150 Vale of Towy, 1s.	20 Bryntail, 13s. 9d.	20 No. Dolcoath, 7s. 9d.
80 South Grenville, 1s. 6d.	70 Rosewarne Cons., 11s 3d	40 North Downs, 2s. 3d.
15 Grenville, £2 13s. 9d.	10 E. Carn Brea, £5 16 3	25 North Basset, 16s.
45 Lady Bertha, 11s. 6d.	20 No. Treskerby, 46s. 3d.	2 Clifford, £18⅜.
10 Frank Mills, £6⅛.	30 Ludcott, 4s. 9d.	20 East Rosewarne, 46s 3d.
10 Great Busy, £3 3s. 9d.	10 Gonamena, 27s.	35 Reinnie Laxey.
20 St. Day United, 11s. 3d.	50 Tolvadden, 8s. 9d.	20 Edward, 4s. 9d.
5 New Rosewarne, £5¼.	100 North Minera, 4s. 3d.	80 Great No. Laxey, 33s 9d

BUYER of Kitty (Lelant), and Rosewall Hill and Ransom. 11

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.,
is a BUYER of—

Great Wheal Vor.	North Dolcoath.	Wheal Crebor.
Pendeen.	East Wheal Russell.	Wheal Buller.
Stray Park.	Copper Hill.	West Caradon.
		Condurrow. 12

MR. WALTER TREGELLAS, 3, CROWN COURT,
THREADNEEDLE STREET, LONDON, E.C., continues to deal at close market prices in all good sound dividend and progressive mines.

W. TREGELLAS has BUSINESS in the FOLLOWING MINES:—Frontino and Bolivia Gold, Santa Barbara, Don Pedro North del Rey, East del Rey, Great Wheal Vor, North Shepherds, Wheal Mary Ann.

An OFFER WANTED for 40 Wheal Ludcott shares. 13

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE:—200 Santa Barbara; 150 Okel Tor, 10s. 6d.; 10 Chiverton, £8¼; 75 Frontino and Bolivia; 35 North Dolcoath, 10s.; 50 Harriett, 4s. 6d.; 30 Roskearnoweth, 10s.; 100 Don Pedro, 15s.; 20 Rosewarne Consols, 16s. 6d.; 2 South Caradon; 60 South Callington, 5s. 9d.; 2 Minera, £275; 25 Clifford Amalgamated; 25 East Rosewarne, £2¼; 30 Cardewall, 33s.; 10 East Carn Brea, £6; 50 Great Busy; 50 Bottle Hill, 12s. 6d.; 100 Pen-an-drea; 5 South Basset; 20 Clijah and Wentworth; 200 Vale of Towy, 2s. 6d.; 5 Frank Mills; 100 Molland, 2s. 9d.; 50 Kelly Bray, 9s.; 20 Ludcott; 40 Lady Bertha, 9s. 6d.; 100 Welsh Gold, 7s.; 30 Hallenbeagle; 25 North Pool. 14

STOCK EXCHANGE SECURITIES.

Railways.	Banks.	English Funds.
Financial.	Foreign Funds.	Discount.
Steamship.	Loan.	Docks.
Ironworks.	Gas.	Water Works.
Insurance.	Telegraph.	Hotel.
Marine Insurance.	Land.	Irrigation.
Foreign Mines.	Cornish Mines.	Devon's Mines.

And other public companies.

MR. PETER WATSON, STOCK AND SHAREDEALER,
begs to state that every information respecting any of the above companies may be had on personal application, or by letter, as to PURCHASES and SALES, with advice as to the most desirable investments.

From the close proximity of his offices to the Stock Exchange, and also the Mining Exchange, he is enabled to act with promptitude on all orders entrusted to him in the PURCHASE or SALE of every description of stocks or shares, at nett prices for cash or fortnightly settlements.

TELEGRAPHIC MESSAGES of customers to BUY or SELL in any of the above companies punctually attended to, at nett prices for cash or half-monthly settlements, at the closest posible market prices of the day.

Twenty years' experience.

(Two in Cornwall and Eighteen in London.)

Bankers: The Union Bank of London, and the Alliance Bank. 15

The present is an unusually favourable period for the investment of capital.

A SELECTED LIST of Railways, Banks, Financial, Foreign Funds, Steamships, Foreign and Cornish and Devon Mines, &c., sent on application, with special recommendations as to investments, &c., on the distinct understanding that any business resulting through his information or advice may be done through him.

PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

EDWARD COOKE, SHAREDEALER,
2, CROWN CHAMBERS, THREADNEEDLE STREET, AND MINING EXCHANGE, LONDON, E.C.

EDWARD COOKE deals at close prices in railway, bank, and other securities usually dealt in on the Stock Exchange, and satisfactory references given in any town in the United Kingdom if required.

FRONTINO AND BOLIVIA.—Shares bought or sold at close market prices. There is still a strong upward tendency in the price of these shares.

Sept. 15, 1865. Bankers: Alliance Bank, Lothbury. 16

JAMES H. COCK, STOCK AND MINE SHAREBROKER,
3, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C. 17

HARRIS AND CO., STOCK AND SHAREBROKERS,
AND FINANCIAL AGENTS,
15, GEORGE STREET, MANSION HOUSE, LONDON, E.C. 18

MR. E. GOMPERS, MINING OFFICES,
3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTED in BRITISH and FOREIGN STOCKS and SHARES.
Terms, 1¼ per cent.
Bankers: London and Westminster Bank. 19

MR. THOS. THOMPSON, MINING OFFICES,
12, OLD JEWRY CHAMBERS, LONDON, E.C.

Mr. THOMPSON being intimately acquainted with the LAXEY DISTRICT, in the Isle of Man, and its various mines, and continually receiving private and valuable information respecting them, will be happy to communicate with anyone thinking of making an investment in the mines of this district. 20

MR. G. D. SANDY, SHAREDEALER, No. 48,
THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange).

Mr. SANDY specially recommends Rosewarne United, East Vor, Lady Bertha, West Caradon, Kelly Bray, North Treskerby, North Dolcoath, Godolphin Hill, and West Great Work, as an early advance in the prices is certain. 21

Correct Daily Price List issued gratis on application.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C., is a BUYER of—

Bedford Consolz.	Frontino and Bolivia.	North Shepherds.
Bedford United.	Hallenbeagle.	North Basset.
Clifford Amalgamated.	Great Laxey.	Great Fortune.
East Lovell.	Kelly Bray.	Wheal Edward.
East Caradon.	Lady Bertha.	Wheal Rose.
East Rosewarne.	Marke Valley.	Wheal Grylls.
Great Wheal Busy.	North Downs.	Wheal Seton.
Great North Downs.	North Treskerby.	Wheal Crebor. 22

T. ROSEWARNE can recommend six mines certain to pay cent. per cent. in a few months.

T. ROSEWARNE, from his own practical experience, and the weekly reports of his agents, is enabled to give sound advice to parties about to operate.

Sept. 15, 1865. Bankers: Bank of London.

MATTHEW GREENE, STOCK AND SHAREDEALER,
9, GRACECHURCH STREET, LONDON, has the FOLLOWING SHARES FOR SALE:—

20 North Dolcoath, 9s.	10 Clifford Amalg., £19.	30 West Great Work (call paid), 15s. 6d.
10 Fron. & Bolivia, £4¼.	5 Grambler (call pd.), £3	20 New Lovell, 12s. 6d.

M. GREENE is in a position to recommend for investment some dividend and progressive mines that are certain for a good rise.

FRONTINO AND BOLIVIA.—Those who acted on M. GREENE'S advice, and bought these shares, can now realise a handsome profit.

ISLE OF MAN.—There are two progressive mines in the Island, contiguous to Great Laxey, that are well worthy the attention of investors.

Bankers: Imperial Bank. 23

DALE MINING COMPANY (LIMITED).—MR. J. B. REYNOLDS has business in these shares, and is prepared to BUY a large or small number at a low figure. He is also a SELLER at a moderate price.

3, Crown-court, Old Broad-street, London, E.C., Sept. 16, 1865. 24

GREAT WHEAL VOR.—The present state of the market for these shares proves the soundness of my advice (given some months since) to buy at £30. My Circular issued last June is still in print, and can be obtained from me on payment of 2s. 6d. per copy; it will be found particularly useful to the holders of the stock. JNO. B. REYNOLDS.

3, Crown-court, Old Broad-street, London, E.C., Sept. 16, 1865. 25

SOUTH CALLINGTON.—The attention of the public is respectfully called to the merits of this property, and I strongly advise the purchase of the stock, feeling assured that the mine gives promise of great success. The fullest information on every point can be obtained on application to me. No time should be lost in making the investment. (See report.) JNO. B. REYNOLDS.

3, Crown-court, Old Broad-street, London, E.C., Sept. 16, 1865. 26

MR. J. B. REYNOLDS, 3, CROWN COURT, OLD BROAD STREET, LONDON, E.C., continues to transact business in mining shares and other securities dealt in on the Stock Exchange, and considers every communication addressed to him as being in the strictest confidence. He advises as to what should be bought, sold, and avoided. He requests his clients to be as definite as possible in their communications. MR. REYNOLDS has business in—

Chiverton Moor.	East Caradon.	Rosewarne United.
East Lovell.	Great Vor.	South Callington.
El Chico.	Great North Laxey.	West Great Work.
East Grylls.	North Dolcoath.	Wheal Grylls.
Sept. 16, 1865.	North Chiverton.	&c., &c. 27

MR. GEORGE BATTERS strongly recommends his friends to buy West Chiverton, Chiverton, Herodsfoot, South Caradon, Devon Great Consols, Great Wheal Vor, Wentworth Consols, and Sithney Wheal Metal for investment. These shares will pay good interest for money at present quotations.

Advertisements have recently been inserted in the columns of the MINING JOURNAL by dealers who, having sold shares for forward delivery, endeavour to frighten timid holders in order to possess themselves of their shares to fulfil their contracts; this system has been adopted particularly against Great Wheal Vor, West Chiverton, and Chiverton shares, and I caution my friends against parting with their property, or giving credence to the unfounded assertions of interested parties.—76, Old Broad-street, London, E.C. 28

BRITISH AND FOREIGN INVESTMENT.—MR. THOMAS SPARGO, 224, and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C., TRANSACTS EVERY DESCRIPTION of BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS of BRITISH and FOREIGN STOCK.

Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.

Bankers Bank of London. 29

MR. T. P. THOMAS, MINING AGENT AND AUCTIONEER,
6, NEW BROAD STREET, LONDON. 30

THE ALLT-Y-CRIB LEAD MINE, CARDIGANSHIRE.

MR. T. P. THOMAS, who was instructed to dispose of the above mine by public auction, at Garraway's Coffee House, Cornhill, on the 19th Sept. inst., is further instructed by the Liquidator to POSTPONE the SALE thereof until further notice.—6, New Broad-street, London, E.C. 31

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL MINING SHAREDEALER, 6, NEW BROAD STREET, LONDON, E.C. 32

GODOLPHIN HILL MINING COMPANY.—MR. THOMAS begs to state that it is intended during the present month (September) to incorporate the above company under the Companies Act, 1862, whereby the shareholders' liabilities are limited to the amount of their subscriptions.

6, New Broad-street, London, September 15, 1865. 33

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,
and one of the first subscribers to the Mining Exchange, having every confidence that the public appreciate the system of advertising prices to the shares they have for sale, on principle objected to the resolution passed at a late meeting of the members of the Mining Exchange. Should, however, the same be confirmed, I appeal to my clients for a continuance of that support which they have hitherto favoured me with, and for which I have no reason, and I believe they also, to regret, and if continued I shall tender my resignation as a member of the Exchange, and advertise shares as before at fixed prices, trusting that my connection of over 15 years with the management of mines and the market, my large dealings and extensive connection, also the regularity in which all engagements have been carried out, both with the public and members of the Exchange, will be the means of securing my share of public support. My office being in the most central part of the City, is used as a register for all stocks and shares that for the moment may not be immediately marketable. Sellers of such stock by that means frequently meet with a ready sale, and buyers effect a great saving in commission and amount paid for stock.

The following shares, being a portion of the lot advertised in the Journal of the 15th July, are still for sale at prices therein quoted, free of commission:—

10 Bryn Gwiog.	55 New Martha.	50 Snaefell (£1 fully paid).
20 Bedford United.	20 North Minera, bearing 20 per cent. preferential dividend (15s. paid).	40 St. Day United.
40 Carn Camborne.		25 St. Just United.
50 Cape Corn. (35s. paid).		50 West Wheal Vor.
50 Drake Walls.		50 Wheal Crebor.
25 East Carn Brea.	20 North Phœnix.	50 Worthing.
10 Great Wheal Busy.	20 North Frances.	30 Wheal Union.
20 Grylls Florence.	50 North Treskerby.	34

Advances made on mining shares.

Parties wishing to dispose of their interest in mines will do well to communicate with the advertiser, who is at all times in a position to purchase for cash.

Parties of respectability can have transfers registered into their names previous to payment. Bankers: London and County Bank.

MR. FREDERICK WILLIAM MANSELL,
STOCK AND MINING SHAREDEALER,
26, THROGMORTON STREET, and MINING EXCHANGE, LONDON.
Bankers: London Joint-Stock Bank.

Mr. MANSELL, having now returned from visiting the mines of Cornwall, strongly recommends his friends to purchase the following shares, feeling assured that by so doing they will reap great advantage. Mr. MANSELL is in possession of special information respecting these mines, which may be had on application, personally or by letter:

East Carn Brea.	North Treskerby.	East Lovell.
Wheal Kitty (Lelant).	East Basset.	North Basset.
South Crofty.	South Condurrow.	Hallenbeagle.
West Vor.	Wheal Ida.	Marke Valley.
	Nangiles.	35

*** There are several mines at the present time which should be immediately sold, having nothing to look forward to but heavy calls, without the slightest chance of any remunerative returns to the shareholders.

RECOMMENDATIONS.

FREDERICK WILLIAM MANSELL, on his return from Cornwall, strongly advised in last week's MINING JOURNAL the immediate purchase of shares in thirteen different mines. The result is most satisfactory, and speaks for itself. Out of the list mentioned, Wheal Kittys have advanced from £6 10s. to £8 10s.; North Treskerbys, from £1 17s. 6d. to £2 7s. 6d.; East Bassets, from £21 to £26; East Lovells, from £12 to £14 10s., £15; and Marke Valleys, from £3 10s. to £4 5s.

All these shares, with the others recommended in the list, must considerably advance in value. Mr. MANSELL would, therefore, urge his friends not to delay, but purchase at once.—26, Throgmorton-street, and Mining Exchange, London. 36

JOSEPH J. REYNOLDS, JUN.,
18, UNION COURT, OLD BROAD STREET, LONDON, E.C. 37

SHARES WANTED IN THE FOLLOWING MINES.
State number and price:—

*Trencrom.	*Kitty (Lelant).
Grambler and St. Aubyn.	*Rosewarne United.
Ding Dong.	South Frances.
Drake Walls.	Copper Hill.
Great Work.	Levant.
Wheal Jane.	South Tolgus.

* Recommended for investment and large profits. H. B. RYE.

Mining Offices, 77, Old Broad-street, and Mining Exchange, London, Sept. 15, 1865. 38

JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C.
(Member of the Mining Exchange),
TRANSACTS BUSINESS in the FOLLOWING SHARES, viz.:—Clifford, East Lovell, Gawton, Carn Camborne, Drake Walls, East Carn Brea, North Downs, North Shepherds, North Basset, East Basset, East Caradon, Great Vor, Great Busy, South Condurrow, South Frances, Wheal Grenville, East Grenville, &c.

Mr. HUME specially recommends South Condurrow for investment, believing that before long this mine will be a great prize.

Mr. HUME also recommends Grenville and West Grenville for a rise in price.

Mr. HUME'S "Circular" for September is now ready, containing valuable information on some of the most promising mines, 6d. per copy.

Business transacted in Railway and other Stock for the account.

Bankers: The London Joint-Stock Bank. 39

WILLIAM BARTLETT, No. 2, BUCKLERSBURY,
and MINING EXCHANGE, LONDON, E.C.

SHARES FOR SALE at fair market prices, and free of commission:—50 North Treskerby, 5 Clifford, 10 Nangiles, 5 North Basset, 5 East Lovell, 20 East Chiverton, 20 Sithney Metal, 5 Trelyon, and 10 Par Consols.

WANTED TO PURCHASE, a few shares for cash in Wheal Jane and East Basset Mines. Sellers will please state number and lowest price.

N.B.—Mr. BARTLETT, having just returned from Cornwall, is in a position to recommend shares that will have a great and speedy rise in price.

Business done for cash or for the fortnightly settlement.

Bankers: Alliance Bank. 40

NOTICE OF REMOVAL.

MR. J. P. ENDEAN, MINE AND GENERAL SHARE DEALER has REMOVED from 1, Crown-court, Old Broad-street, to more extensive and convenient offices, at 5, FINSBURY CHAMBERS, LONDON WALL, opposite Great Winchester-street.—June 30, 1865. 41

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., recommends for immediate purchase Chiverton shares. Being now at a very low price, a great rise may immediately be expected. Full particulars on application.

SPECIAL BUSINESS in British State Company. 42

BREWIS AND LYNCH, 3, CROWN COURT, OLD BROAD STREET, LONDON, E.C., and 73, CLAYTON STREET, NEWCASTLE-ON-TYNE (Mr. Edward Brewis of the Mining Exchange), can give the names of two or three *bona fide* undertakings where great and certain profits may be made. 43

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.

MINES INSPECTED and faithfully REPORTED ON. DEALER in MINING, RAILWAY, and OTHER SHARES.

His monthly Circular forwarded on receipt of six postage stamps.

Criddis Mine, St. Issey, Padstow, Cornwall. 44

THE INVESTMENT, LOAN, AND FINANCE AGENCY undertakes the sale and purchase of Public Securities, and affords reliable information to Capitalists who seek permanent investments, or the temporary employment of money, to the safest and best advantage.

The Loan and Finance Department includes Financial Agency generally, Loans, Deposits, &c., and advances are negotiated on Public Securities having a market value.

CHARLES PETERS, Secretary.

Offices, 12, Clement's-lane, Lombard-street, London, E.C. 45

Original Correspondence.

TIN-DRESSING—THE IMPROVED BUDDLE.

SIR,—In your report of the late Exhibition of the Royal Cornwall Polytechnic Society you notice "the model of the improved buddle stirrer and packer" in use at Dolcoath as an object worthy the attention of visitors, and state that it will be examined with interest, a fact which I will not for one moment dispute; but you add, "A second model of stirrers and packers comes from *another quarter*. It is not quite in working order, but the principle seems to be the placing of the packing hammers between two kieves, one of which is, therefore, struck with the forward and the other with the backward movement." Of the latter model I will, with your permission, give the brief history, and then leave you and your readers to judge whether it has received that justice which it merits or not. The model in question was made by me when at the late Truro Mining School, to show that machinery might easily be applied to perform one of the most laborious operations of the tin-dresser, and which had hitherto been always performed by the hand—the operation of tossing or stirring the ores in a large tub or kieve, for the purpose of separating the fine waste. This model was exhibited at the above society's meeting in 1856, just *nine years ago*, and was pronounced worthless, because, as it was said, the ores must be stirred by hand. It could not be efficiently performed by machinery. It appears, however, from what I learnt about nine months since, that Capt. Charles Thomas had begun to think differently, and had actually erected a *machine dolly-tub*, similar in principle to my model, and it was very successful; I, therefore, thought it desirable that the committee of the society should be asked to reconsider the decision to which they had previously arrived, and in order to show them that I had originated the idea, I requested the curator of the Truro Institution, where my model had been for the last seven years, to send it again to the Polytechnic Society's exhibition. This was done, and as I have never seen it during the last seven years, I have no doubt it was a little out of order; but there it was, together with the society's report of 1856, to prove that nine years ago I had designed and invented "the machine dolly-tub." The secretary, Mr. Sydney Hodges, kindly introduced the subject to the committee, and as it can no longer be considered *worthless*, the committee now state that it is not *new*, but had been used 30 years ago, and again refuse to acknowledge that it deserves any consideration from them. Now, I ask, where has it been used? and I think I am entitled to an answer; and if it cannot be shown where the work of stirring and packing has been performed *by machinery* previous to the erections recently made at Dolcoath, and other mines in Cornwall, then I think you will agree with me that I have not received justice from the the committee of the Royal Cornwall Polytechnic Society.

WILLIAM RICKARD.

Alverton House Academy, Liverpool, Sept. 13.

LAYING THE ATLANTIC CABLE.

SIR,—No event in the year 1865 has created so general an interest in the minds of every nation, and of every class of man, or has had more hearty and unanimous wishes for success than the achievement of this vast undertaking; but our most ardent wishes are again doomed to disappointment by the return of the expedition.

There can be no doubt but that every plan that skill and high intellectual powers could devise has been adopted, and that the expedition was placed in the hands of most competent men; but their failure must be, and is, a proof that, however perfect may seem their appliances, there is a defect existing in the machinery then in use for laying the cable. I feel sure that those gentlemen who have been connected with the affair will allow that in this advancing age there is no invention of man's but that will bear improvement, and this improvement is now respectfully offered, and I trust, for the sake of advancing so gigantic an undertaking, they will avail themselves of the offer before commencing again, as I have heard it expressed by many mining engineers that the machinery employed was inefficient, and which opinion has proved too true.

In thus taking upon myself to condemn any plan then in use for laying the cable, it must not be taken as presumption on my part, as we mining engineers, generally speaking, have great experience in raising and lowering immense weights to great depths, and often under most trying circumstances.

On visiting some mines in the vicinity of Mold, I called on my friend Captain John Lloyd, of the Hendre Mines, who I found busy preparing plans and model of a most simple and ingenious method (he has discovered) of laying or raising the cable, and which I am sure must eventually prove a certain success, as the advantages that would be derived by its adoption would be unparalleled, both for laying or raising, with greater speed and less chances of damage by friction, &c., to the cable, and thereby the saving of time and the necessarily great expense attendant on such undertakings. I most earnestly recommend this discovery to the Atlantic Cable Company and to the Government officials, and trust that they will give it a fair and impartial trial. All necessary information may be obtained by applying to Capt. John Lloyd, Hendre Mine, Mold.

Rock Cottage, Mold, Sept. 13. ALFRED POOLE, M.E.

A FOREIGN COMPANY LIMITED.

SIR,—A curious specimen of how some concerns are managed has come under my observation, and, as the information may influence to action some parties who, I am led to believe, are interesting themselves in obtaining an alteration of the law, by which at least one-half of the capital raised should be expended for the purposes for which the company was formed, I trust you will give the particulars a place in the Journal. The reader will look in vain for the expenses of carrying on the practical workings of the company—the business being apparently confined to the London office, the directors, engineer, and secretary.

Dr.—Payments made on shares to July 19, inclusive		£1461	0	0
Payments made to the credit of the company at ——, by parties who have not applied for shares		22	0	0
Arrears due by shareholders on account of shares		660	0	0
Interest due by ditto		41	17	6
Property held by company—Furniture of office		28	19	0
" Interest on bank account		6	7	4½
" Bills not presented, &c.		77	1	8¾
Balance due secretary, money advanced by him		78	5	0
Balance due by the company		702	5	4¾
Total		£3177	15	11½
Cr.—Expenses of management: Directors' fees		£ 429	0	0
" Engineer		297	14	9½
" Office rent, &c.		55	7	6
" Printing and stationery		9	14	1
" General expenses		441	12	11
" Stamps, postages, and telegrams		14	13	4
Debts and liabilities: Fees of administrative directors		571	0	0
" Fees of corresponding directors in ——		176	13	4
" Directors' travelling expenses		232	0	0
" Secretary's salary		450	0	0
Estimated expenses attending the getting up of the company, registration, stamps, and all insidental expenses		500	0	0
Total		£3177	15	11½

Surely the shareholders in this strangely-conducted affair will bestir themselves, and institute an enquiry into its actual position, and what they are to expect from its continuance. If left to the officials, they appear so well paid that any alteration in the present system cannot be expected from them—they, doubtless, will be content to make calls upon the shareholders and pay themselves, and in which they appear to be very exact, if we are to judge from the engineer's charges—*qy.*, what are his duties?

CORRESPONDENT.

CORNWALL TRADING COMPANY (LIMITED).

SIR,—It must be gratifying to find that a company is in course of formation for the supplying of mines with materials, &c. It has been a crying evil, and the source of much dissatisfaction that for many years the Cornish merchants have had everything their own way, except in such mines as are managed by Messrs. John Taylor and Sons, who, through the whole of their Cornish management, have been regularly contracting every two months for a two-monthly supply of materials, by which they save many hundreds every year to the adventurers. There are several others who will not allow their hands to be tied by the Cornish *clique*—who act fearlessly and independently, and purchase their goods at the best and cheapest market—such as Capts. Teague, Daw, Peter Clymo, Joseph Vivian, and T. Glanville, of East Carn Brea, who, in consequence of his straightforward and manly conduct, has been subjected to such cruel treatment by various letter writers. Let anyone who has a knowledge of mine materials go and compare the quality and price in these mines with that of their neighbours, and he will find in all probability a saving of 5 per cent. in quality, and very likely 4 or 5 per cent. in price. It is encouraging to see at the St. Day United meeting, held on the mine some weeks since (although the greatest opposition was brought to bear by the Cornish merchants), the London directors passed a resolution, by some hundreds majority, to have all goods supplied by tender. They will see what the saving is. A good beginning: let others do likewise, and it is my firm belief (and not mine alone, but that of hundreds) that the Cornish Trading Company will have a liberal, free, and independent support.

I hear Mr. J. G. Chilcott, of Truro, has consented to become the solicitor of the company. A better choice could not have been made in Cornwall.—*Sept.* 14. C. D. E.

BRITISH MINING IN 1865.

SIR,—Allow me a little space to make two or three comments on the article, in last week's Journal, entitled "British Mining in 1865." I agree with the writer in the legitimacy of the pursuit, and I admit further that mining is, or ought to be, by this time reduced to a science, having about as much certainty in its results as several other commonly called sciences—*e.g.*, the science of medicine, in which, admittedly by all, the most unforeseen results constantly occur, even in the hands of the most skilful professors. It is the same in mining, with this difference—the public do not know how to distinguish the skilful professor from the quack; there exists no college, no board, which can certify to the ability of the man who has made a study of scientific and practical mining, and thus enable those not behind the scenes to know whom they may consult with the least chance of being victimised. For instance—I receive by post a prospectus of the "Polly Ann and Wheal Timothy United Mining Company (Limited)," appended to which are the reports of a dozen "captains" (whom many uninitiated would probably think were most likely captains in the Royal Engineers), speaking in the most glowing terms of the undertaking—it cannot be called a speculation. The most scrupulous and accurate observations show that there is only needed a very moderate expenditure, and a return of 60 per cent., at the least, may be confidently expected. In another post or two I receive a Circular from a mining broker, whose name I am familiar with from so constantly seeing his advertisements in the Journal, reminding readers that mines he has recommended have gone up 600 to 700 per cent., who begs particularly to call my attention to the unprecedented opportunity there is for an investment in the "Polly Ann," &c. If I will send an application through him he will do his best to secure me an allotment; but, as the shares, with 1*l.* paid, are already freely bought at 2 to 3 prem., he cannot promise. I follow his advice, and apply for 50 shares, thinking I may be so fortunate as to get 10. To my great dismay, by return of post I got an allotment letter for the whole 50. In two or three weeks I find my shares quoted at a ruinous discount, and unsaleable at that. The broker whom I apply to tells me it was a "regular do"—everybody knew that, &c. Now, Sir, when he tells me this he may, of course, be trying in his turn to do me. I am aware of that; but how am I to know whom to believe? In some specious Circulars good concerns are unsparingly traduced, and bad ones are as unsparingly lauded, all for the private selfish ends of the man so acting. Heaven forbid I should assert that all published opinions are dishonest; no doubt there are many most honourable men engaged in the mining business, either as brokers, agents, or captains; but how am I to know them? SIGMA.

Cheltenham, Sept. 9.

GREAT DEVON AND BEDFORD (COLCHARTON) MINE.

SIR,—Seeing no reply in the Journal to my letter of Aug. 26, wherein I asked the agents of this mine to explain certain discrepancies found in their reports, dated respectively July 19 and Aug. 12, I must say I fear those gentlemen lack the common courtesies of life, and are also deficient of mining ability, and do much injury to the present company, by not answering the questions which arise from their reports. They may rest assured whatever they send before the public in the shape of reports will be strictly loooked into; and as a proof of this, I would ask them whether the directors, shareholders, and public, may depend on the truthfulness of the report in last week's *Mining Journal*? For myself, I question its truthfulness very much. The report of Sept. 7 begins, first, with a cross-cut driving north, which is extended about 6 ft., but no lode or branch has yet been met with. I would ask the agents this question, whether they ever expect to cut the main, or any part of the lode underlying south in this north cross-cut? if they do, I must say they know little of practical mining, or my informant has greatly deceived me—indeed, he positively states to me they have already driven a cross-cut north 5 fathoms, some 30 fathoms further east from the present cross-cut, to see whether any part of the lode was further north. If what I heard be true, which I doubt not, respecting these cross-cuts, I must say the agents are either deceiving the company, or know nothing about mining. The next point it refers to is the 40, east of the cross-course, driving east, wherein they state the lode is 2 feet wide, composed of quartz, prian, and copper ore, a very fine-looking lode, and they believe will soon prove productive. When I read this part of the report I was stroke with wonder and astonishment, and I am led to ask, is it possible men holding such positions can place their names to such questionable statements? Perhaps the manager will inform me how many times he has been underground during the four months of his appointment—is it true he has been underground once? This being the case, and it is known by all the company, and they are satisfied, there is no room for me to complain on this point, but as a public man, and connected with the mining world, I must say whenever I find agents sending out untruthful reports of mines I feel bound to interfere, so that legitimate mining may not be injured by such reports. INQUIRER.

MINING IN IRELAND—THE CARYSFORT MINING CO.

SIR,—In accordance with my promise, I reply to the letter of "A Shareholder," which appeared in your columns of August 26, not being able, owing to absence and pressure of business, to do so in time for insertion in your last week's Journal. "A Shareholder" continues to show the same obstinate and culpable disregard of candour and correctness that has all along characterised his statements, and the references he makes to mine, as well as the inferences he contends—or, that is to say pretends—they only admit of, which, of course, are always in his favour. His letter, besides, consisting of a repetition, in an aggravated form, of things asserted in former letters, ventures on several new allusions and insinuations, some of which (those most calculated to lead the judgment astray, and suggest false conclusions) I shall only notice, and of the real character of which I shall make as clear an exposure as I have made of the others indulged in against me by "A Shareholder." The observations that I shall be required to make will be comparatively very few, fortunately for yourself and readers, whose patience must have been tried more than enough by the uninteresting and unprofitable correspondence between "A Shareholder" and myself, which has occupied by far too much of your valuable space of late. The groundless allusions and insinuations of "A Shareholder" would, however, if I allowed them to pass unnoticed and uncontradicted, justify impressions and inferences calculated to damage my professional reputation, and lower me in the estimation of my friends, and more particularly in the opinion of the public. Had it not been for such considerations, and the risk that would have attended a silent course, you would have been spared being troubled with the necessarily dull letters I have been compelled, by the vexatious conduct of "A Shareholder," to write in self-defence. I leave it, also, to the decision of right-minded men whether the conduct of "A Shareholder," as a secret assailant, in levelling his unscrupulous allusions and insinuations against me in such a personally offensive manner as he is guilty of (regardless of the serious injury that it might do me, which evidently affords him much vindictive pleasure), is not deserving of being held in contempt, and denounced in suitably indignant language.

His disguise betrays a want of manly courage, his attacks being no other than allusions and insinuations, unsupported by any proof or justification, which I have called for in every letter that I have written, but in vain; and that "A Shareholder" has not invalidated, or in the least weakened, any of my statements must be very clear to all of unbiassed judgment. In the conduct of an open enemy, however much opposed to the right principles by which we should be guided one towards the other, there may be courage, which can never be pleaded in favour of a secret assailant. I must, however, be content, I suppose, in knowing what sort of an individual "A Shareholder" is, judging from the personally offensive and commonplace character of his effusions, without being allowed the privilege of knowing who he is. In dealing with his new batch of allusions and insinuations, I first notice the disparaging way in which he speaks of the letter of "An Investor," in one of your late Numbers, and designates it a specimen of "toadyism," because it bestows on me great praise, on account of the estimation in which my professional reputation and character are held by the public (such praise, however, being due to a much more eminent and better man than I am), and in the next place the depreciatory reference that he ("A Shareholder") again makes to my connection with the Devon Great Consols Company, evidently begrudging me my position as consulting mining engineer, having also in view, as a consequence, to lessen my influence in the mining world, and to otherwise injure me. On such points I have only to observe, in reply, that I shall ever feel properly jealous of my reputation, and be grateful to my friends for their high appreciation of the same, as well as their approval of the way in which I perform the duties that devolve on me when called upon to inspect and report on mines, it being with me of paramount importance to satisfy to the fullest extent my conscientious convictions, regardless of pleasing or displeasing any parties interested in my opinions and decisions. It is for a strict adherence to this principle (in other words, for having only given such a condemnatory report of the mines in which "A Shareholder" is interested, as their hopeless poverty fully deserves) that an unworthy attempt has been made, which is still being kept alive, to bring me down in public estimation, and seriously injure me—such an attempt, indeed, as cannot have failed to excite the indignation of every honest man who reads your valuable paper, which as an impartial medium, allowing desirable freedom of debate, and the display of commendable controversial courage, has long since secured for its Editor the respect and confidence of the mining community, to testify to which affords me much satisfaction. "A Shareholder" also says, in effect (I haven't his letter to quote from), that it is to be inferred from my letter (and for which, of course, he is glad!) "Ballintvalley" is the only one of the company's mines I have a poor opinion of, which anything but harmonises with what he unfortunately allows himself also to utter in the course of an ill-conducted special pleading, and contradictory letter. He says, in a very exultant manner, looking at the issue of "Ballintempie," another of the company's mines (being evidently fully confident that it will be too overwhelmingly successful for my peace of mind), that it will prove one of the worst errors of judgment I have ever committed in the course of my long mining career, the returns of ore being already equal, or nearly so, I forget which, to the payment of the working expenses of the mine! Upon his own showing, is he not fairly caught in such a contradiction as no one would have given him credit for being stupid enough to have allowed? The plain facts are to be found fairly stated in my report, and subsequent letters in defence of the same, the condemnatory character of which documents is fatal to the interests of "A Shareholder," whatever he may say to the contrary, for the attainment of an object that it will not be doing him great injustice, after his unscrupulous conduct towards me, to suspect he has in view.

I have said of the mines just referred to ("Ballinvalley" and "Ballintempie") that the "gossan back," or superstructural portion of the former lode is of a specious and deceptive character, and that the latter mine is an exceedingly poor and unpromising one, unworthy of any further outlay, too much money having been already sunk in it, to which opinion I firmly adhere, which I assure you occasions me much regret, knowing the contrary opinion of others, and that in consequence much disappointment exists amongst the shareholders, and dissatisfaction prevails against me, the injustice of which I have but done my duty to myself and the mine investor in resisting. As to what "A Shareholder" has been so foolish to say about the Ballintempie return of ore being equal, or nearly so, to the payment of the working cost of the mine, I have only to observe that it amounts in reality to nothing more than pretty nearly resembles a caricature, notwithstanding the mystification of "A Shareholder" in regenerating the matter, which stands thus:—There is a small piece of old tribute ground in operation in the upper part of the mine by a few hands (four or six, I think), at 12*s.* or 13*s.* 6*d.* in 1*l.*, in mining lingo "an old soldier," which with hard work, and being in "a dry back," involving no mechanical arrangements or water charges, about clears its way. Surely "A Shareholder" ought not to have allowed himself to suppose that I should not expose such a matter, it being brought forward with a view to the inference that I have given a poor opinion of a good mine, which I should, indeed, have much liked to have been able to do. Looking at the over zeal of "A Shareholder" in the treatment of this matter, his colleagues have much reason to exclaim "save us from our friends," with which "A Shareholder" is to be charged. He has brought my brother's name in connection with these mines, clearly indicating that his judgment and opinion are much preferable to mine, also leaving it open in such a speculative way as not to shut out the inference that he has seen the mines in question, and that his opinion is different to mine, which is not the case; but had it been it would not have lessened our respect for each others opinions, or produced any unpleasant feeling between us, however much it might have suited "A Shareholder." That we are not such jealous-minded men I am quite sure our friends and the public generally will readily believe.

J. H. HITCHENS.

PROSPECTS IN THE GWENNAP DISTRICT.

THE RUN AT CLIFFORD AMALGAMATED.

SIR,—No mine in this county is likely to be more financially affected by the anticipated rise in the price of copper than the Clifford Amalgamated, the shares of which have been unduly forced down considerably below the value of the plant on the mine, in consequence of a "run" in the underground workings, which has been made the most of by parties "bearing" the shares. True, this "run" has occasioned inconvenience, expense, and delay in the working, but to a very trifling extent compared with the depreciation in the market value of the property, for at most it will cause a suspension of one more dividend. Here is a mine second to none in the two counties as a safe investment for capital; it covers an area of about three miles, and has been worked for the last fifty years at a fabulous profit, and looking at it in prospective is likely to work for the next fifty years with equal success. It must be borne in mind that this is an exception to most of the mines in the county, as will be seen from the quantity of ground and number of lodes comprised within the limits of the sett, it being as large as the average of six ordinary ones. In a mine of such magnitude mishaps will occur, hence the necessity of having a reserve fund to provide for such emergencies; some years since a few litigious shareholders opposed the keeping this fund, consequently the profits have been divided amongst the shareholders closer than any mine I know of. The same parties who were opposed to this measure have now materially assisted in the depreciation of the market value of the property, by throwing their shares on the market, evidently with a view to buy them back again at a profit, thereby causing the unwary to part with their shares at a great sacrifice. I trust at the next meeting the shareholders will see the propriety of establishing this fund, and so avoid a repetition of such consequences; and also to revise the order of choosing the committee. There are six who form the committee of management, three of whom hold in the aggregate about 600 shares; those gentlemen certainly feel that they have a stake in the mine, and should, for the more effectual management of the concern, be associated with parties equally, or nearly so, qualified.

The balance at the next meeting will undoubtedly be against the shareholders, but it does not accrue from expense attending the repairing of the run, but from the fact of a large quantity of the ore ground being temporarily covered, they are unable to return their usual quantity. This expense is nothing when compared with the unavoidable delay in bringing the ore to market, so that the suspension of two dividends is more in consequence of the delay occasioned than any permanent injury to the property.

But, apart from this, suffice it to say the recent improvements in the eastern part of the mine will more than compensate for any damage arising from the run, or even the temporary decline in the price of shares, so that the present is a favourable opportunity for the investing public to take advantage of the depressed state of the market.

CHARLES RAWDEN.

THE CAMBORNE VEAN MINE.

SIR,—The prospects here are of the most cheering character, and since the last meeting of adventurers, on June 26, the mine has improved, which at that period looked comparatively gloomy, and the accounts presented showed a debit balance of 852*l.* Since that time 13 tons of tin have already been sold; this, with the additional quantity which will be sold prior to the next meeting (to be held on the 24th proximo), will nearly meet the cost incurred. There are several mines in this district vastly inferior in point of value to Camborne Vean, but which are quoted at ten times the amount. This mine is now selling for 1400*l.*, being about one-third less than the value of the machinery, and it is the hearty wish of every Cambornite that it may again enter on the Dividend List. In the advertising columns of the *West Briton*, of Aug. 25, amongst other mines which I recommended for immediate investment was East Wheal Lovell (present price, 14 to 15), since which date the mine has increased in value to the extent of over 500*l.*, and shares are expected to have a much further advance. East Basset (25 to 26), South Condurrow (3⅝ to 3¾), and Wheal Buller (28 to 30) have shared in the transactions of the Cornish market this week, which presents a far more healthy aspect, and the general impression is that mining has for some time seen its darkest day.

Penvu, Camborne, Sept. 14. ALBERT E. PRICE.

P.S.—Since writing the above, I am sorry to learn from a letter received by this post from my brother, dated Tucacas, Aug. 22, that Capt. Browne, manager of the Quebrada Mines, Venezuela, South America (late of Redruth, Cornwall), died in that country on the 15th, at a quarter-past five, P.M., of fever.

THE CLIFFORD AMALGAMATED MINES.

We have received from Messrs. Brewis and Lynch, of Newcastle-on-Tyne and London, the following report on these mines (respecting the position and prospects of which a great deal of interest at present exists), which has just been made by Capt. Robert Williams, of Wheal Seton:—

Sept. 8.—Agreeably to your instructions, I inspected the Clifford Amalgamated Mines, and went underground. In Davis's engine-shaft, which is now 224 fathoms below the adit, the lode in the bottom of the shaft (which is not below the level) I could not see for water, stuff, &c. The sumpmen are engaged in cutting ground for the purpose of fixing cistern, &c., preparatory to sinking the shaft below this (the 224) level. The 224 is driven west of the shaft 8 fms.; the lode in the present end is worth from 2 to 3 tons of ore per fathom. The end is driven east of shaft 12 fms., and for this distance has yielded about the same quantity of ore per fathom as is now in the present end—8 tons per fathom, and an improvement may be expected here, as in the 212, a few fathoms before the end alluded to, a bunch of ore was driven through which yielded 15 tons per fathom. The 212 is driven east of Davis's shaft about 60 fathoms, the first 50 fathoms of which will yield on an average from 7 to 8 tons of copper ore per fathom. The 212 is driven west of Davis's shaft 34 fms., but has been suspended for some time past. The reason why this end is stopped is in consequence of a large stream of water issuing from the lode west of the run, and if cut down and brought back to Davis's the lifts are not large enough to keep it away; it is, however, the intention to change—that is, to take out the present and put in a larger lift at Davis's engine-shaft, from the 224 to the 190, and I scarcely expect that the 212 will be resumed until this is done. This level has been poor from the shaft until the last 8 or 10 feet, when the lode improved, and will now turn out, as the agent informed me, 5 tons of ore per fathom; I did not see it myself, as a rise is being put up in the back of this level to the 200, the staff from the rise being in the level, so as to prevent my seeing the end: 40 fms. west of the above-named shaft is the eastern part of the run in the 200, and at this point a winze has been sunk 3 fms., and commenced to go west from the winze at this depth to get under the run. The end is driven 8 ft. of the north and south part of them, and if as good as the part on which the end is being driven, and I have no doubt but that it is, it will turn out 20 tons of good ore per fathom, and from information it must improve, as one or two of the buried stopes would turn out 40 tons a fathom. There are about 20 fms. of ground to be cleared, which the agents calculate will be done in two months, but my opinion is that the time specified is quite little enough, and would rather give it a month or two more, say three or four months; the men are driving this level at 6*l.* per fathom. There is also an end driving east from the eastern stope, west of the run, but the ground is much harder. There are four stopes working in the back of the 212, turning out 6 tons of ore per fathom; three stopes working in the bottom of the 220, west of the run, yielding on an average 10 tons of ore per fathom. You will please to observe that the 220 west of the run, is the same level as the 200 east of the run. There are several other stopes working in different parts of the mine that will turn out 2 to 4 tons per fathom. There is a stope working in the back of the 224, east of the shaft, turning out 7 tons per fathom; and one in back of the level, west of shaft, turning out 5 tons per fathom. You will perceive that there is 20 fathoms of ground opened out in this level, and when you see two stopes already working close enough the profitable ground above the 212 is getting short. It appeared that 350 tons a month were being raised from the three stopes that are now buried; take this (say) at 8*l.* per ton, 2800*l.*, or bring it back to 2000*l.*, which amount must be going behind, and say, for a rough guess, from the commencement of the run to the time they are again get in working order, four or five months, the mine must be several thousand pounds in debt, in addition to which they talk of putting an engine at Frederick's shaft for pumping water, and a man-engine, and by the time this is done, with pitwork from the surface to the 190, the present depth of the shaft, how much less than 8000*l.* or 10,000*l.* more can we say? I believe it will take every farthing.

DEVON GREAT MARIA CONSOLIDATED COPPER MINES, LAMERHOOE, NEAR TAVISTOCK, DEVONSHIRE.

The following report on these mines has just been made by Mr. George Henwood, mining engineer:—

Sept. 7.—These mines are comprised in an extensive sett, being 400 fms. east and west on the course of the lodes, and 300 fms. north and south. The strata are killas or clay-slate, highly mineralised, and of precisely the same nature and composition as the strata in which the lodes of the Devon Great Consols are embedded, which mines are but a short distance, and are in the direct strike and run of the lodes of these mines; as it has been ascertained that the Consols lodes have been heaved 75 fms., it is certain the lodes must pass through this sett; the killas bears precisely the same relative position to the granite as the celebrated mine—indeed, their geological features may be said to be exactly similar in all respects. The lodes operated on are three in number, and are known as the Orchard, the middle, and the north lodes; they are about 20 fathoms equidistant, and have a dip or underlie north of about 18 in. to 24 in. per fm. I first examined the Orchard lode, where active measures are being exerted during the present dry season, and since the removal of the crops from the fields, to costeen on the backs of the lodes; these have been proved for hundreds of fathoms; the lode is found to average about 10 to 12 ft. wide, composed of capel, quartz, gossan, posh, engany spar, mundic, and spots of coated and yellow copper ore; upwards of eight pits have been sunk for this purpose, and the lode found masterly in all. I then went underground, where a cross-cut has been driven to intersect the lode, at a depth of 10 fms.; this adit has been cleared out, well timbered, and secured in a substantial manner; the lode when cut into was found to be very large, of the same size as in the pits above described. A level has been driven on the back of the lode for 50 fms., and cut into at various points for proof; it has been found to carry its size and quality as perfectly as may be desired, improving in character as it goes to hill, and thereby increases in depth; the wall is

...ch, perfect, and well defined, and is seen for nearly the whole distance the level is ...en on its back, the ground being so much easier for driving than the lode itself. ...ence proof is necessary to enable anyone acquainted with mining to pronounce this ...a champion lode; the lode stuff is all that can be expected or desired in this kind ...asure, and at this depth. On the middle lode, costeaning is being prosecuted; the ...is so similar in composition and character to the former as to make its description ...ere repetition. The north lode has been cross-cut, as in the Orchard lode, and driven ...0 fms. east. A shaft has been sunk on the lode, but in a very irregular and unsa...factory manner, to 30 or 40 fms., and is now full of water. A new shaft, 13 by 7 ft., ...has been commenced at a proper point to cut the lode at 50 fms. from the surface; this ...must well secured by walling, and is down several fathoms. This should by all ...means be continued; it will cost less than to cut down the old shaft, and be 100 times ...safer; the lode may at any time be tested by short cross-cuts from this shaft to ...the south, but I advise no money to be spent thereon until at least 20 or 30 fms. be...sunk. I consider this the most eligible lode in the sett, and one that should induce ...vigorous development, if any indications can be quoted to satisfy the most scrupulous. ...This lode is 6 to 8 ft. wide, composed of quartz, sugary spar, capels, black and yellow ...copper, peach, and a good deal of mundic; the copper here is more plentiful than in the ...Orchard lode, and the lode itself, though very like it, is not nearly so hard; it has beau...tiful well-defined walls, runs parallel to the others, the bearing is 18° south of east, and ...dips 18 in. to the fathom. On the north are other known lodes, but these are not ...developed. The sett is surrounded by celebrated mines; on the west by Great Wheal ...Vor, south by the Gunnislake series, including Clitters, Bedford United, &c., on the ...east by the Devon Great Consols, on the north by Wheal Concord, Collacombe, &c., so ...that the Devon Great Maria is in the very heart of this famous district. The lodes are ...of such a character that I cannot think you may expect any great returns until an ade...quate depth be reached. I, therefore, advise you to sink your engine-shaft on the north ...lode; you may depend on having a rich mine in depth on that lode, and I believe ore ...in quantity will be found on it at a shallower level than in either of the others. As the ...present dip north every fathom sunk in the engine-shaft nears the other lodes in depth, ...and that when down to the 80 the middle lode will be at the engine-shaft, and the south, ...or Orchard lode, may be reached by a cross-cut, or if desirable it may be drained by flat...ground previously. The district, the strata, and the lodes are unexceptionable, and cannot ...fail to be productive: if they do, of which I have no manner of doubt, you will have ...a sound and lasting prize; if not, it will be of no use to pay any attention to appear...ances, or to judge from Nature's dictates.

Meetings of Public Companies.

THE GREAT LAXEY MINING COMPANY.

The half-yearly meeting of shareholders was held at the Imperial Ho... Douglas, Isle of Man, on Wednesday. About thirty of the principal ...eholders were present, amongst whom were Mr. G. W. Dumbell, ...ker, chairman of the directors; Messrs. H. B. Noble, A. D. Lewis, ...Buxford, R. Rem, J. Kitto, R. Curwen, J. B. Melledew, L. Garrett, R. Lomas, T. ...Thomas, W. Beckwith, J. Spittall, C. Cleator, T. Nuller, L. G. Howard, F. Broad..., J. Hall, Capt. Rowe, &c.

Mr. G. W. DUMBELL, who presided, having opened the proceedings by reading the ...tice of the meeting, called upon Mr. Beckwith to read the directors' report; and Mr. ...Thompson (the secretary) read the manager's report.

On the motion of Mr MELLEDEW (of Liverpool), seconded by Mr. BROADBENT, the ...accounts, a copy of which had been furnished to each shareholder, were taken as read.

The accounts are made up to July 7, and show that, after payment during the half-year of ...£2,000, there is a balance on the working of the mine in favour of the company of ...£2,782. 2s. 6d., against 10,873l. 9s. 11d. at the end of the last half-year. The balance ...of £13,655. 3s. 4d., standing to the credit of the working account, is further increased by ...£1,016. 16s. 6d., balance of the new capital account, making the balance of assets over ...liabilities 23,601l. 17s. 10d. The value of the ore raised during the half-year was ...£11,911. 2s. 5d.

Mr. CURWEN asked how it was that the company had been obliged to pay income-...tax.

He thought that that tax did not apply to the Isle of Man.

The CHAIRMAN replied that the company being registered in England under the ...Limited Liability Act, the Government had required it to pay the income tax.

Mr. DUMBELL then continued: The shareholders having agreed to take the accounts ...read, it is now my duty, as Chairman of the directors, to move the adoption of the di...rectors' and manager's reports, and the passing of the accounts. I think the statements ...made in the reports which have been read to you, and the favourable nature of the ac...counts, showing a large balance in hand, and enabling us to pay a dividend of 10s. a ...share, and to declare a bonus of 4s. per share, afford you the best possible proof that ...the mine is being carried on in a manner beneficial to the shareholders at large. You ...will observe that the mine is now attaining a position the directors have long wished ...it would attain, and that the shareholders may reckon upon a dividend as regularly as ...their money were invested in the funds. Not only do we give you a dividend, but ...we declare a bonus, which we have fixed at 4s. a share upon the original shares and at ...that amount upon shares entitled to one-half that sum, both of which are payable ...on the 26th inst., or 14 days after this meeting. Nothing can be more satisfactory to ...the mind, as showing the prosperity of our undertaking, than this fact; and it must ...be remembered that we pay our dividend and bonus solely out of the profits of our ...mine (for we are prevented by the Articles of Association from touching our capital), ...but we leave the balance in hand as nearly as possible the same as it was last ...year. At the last half-yearly meeting we declared a dividend of 10s. per share, ...and had a very respectable balance in hand, and we have about the same in hand ...this year. At the last half-yearly meeting it was the general opinion that the di...rectors should always keep a certain balance in hand on which to fall back, in order to ...pay the dividends payable by the mine, should anything occur, such as a breakage ...of machinery, that might temporarily interfere with the amount of the profits. We ...have, therefore, kept about 4000l. for that purpose, so that if anything does occur in ...the way I have indicated, the shareholders will still have their dividend. Some mis...conception has arisen as to the amount of capital we have in hand, and it has been ...stated that we have more than we ought to have. Now, you may take the profits of ...the mine at 14,000l.; the rest is capital, which we cannot touch. We use our capital ...as much, but we always have it hand in bills that are becoming due. It is thought that ...we have a great deal of money in hand, but you see that we cannot touch it. We must ...have our capital, and we are not allowed to make a dividend out of anything but the ...profits: 10,000l. is the amount of our working capital; we have the same sum which ...is set aside for the erection of the proposed speiter works, and 5000l. is the amount ...of available funds in hand. You will remember that at the last meeting in London, ...a year ago, it was resolved to erect speiter works at Laxey, and for that purpose the di...rectors purchased land at Laxey in the most advantageous situation that we could get. ...After considerable enquiry and investigation, we selected as manager of those works a ...gentleman of great experience, a foreigner, who had the highest recommendations. We ...have got his gentleman to come over here, and it must be remembered that not only would ...he have to manage the works, but to superintend their erection also. He approved of ...the plans for the works, but he represented to us that we could do better, and save very ...much expense, by not erecting the works in the Isle of Man. We subsequently consulted ...that gentleman of great experience in these matters, who gave us most valuable advice, ...and the directors held a meeting in Chester to consider the matter. Ultimately Mr. ...Lean and Mr. Cleator, two of the directors, accompanied by Captain Rowe, the manager ...of the mines, proceeded to Leith, where they found a most eligible site for the erection ...of the works, and that by bringing the blende there a very great saving would be effected. ...In consequence of the motion passed by the shareholders, the directors considered that ...they were morally bound to erect the works at Laxey, unless they obtained your permis...sion to erect them at Leith. In the meantime, during our consideration on this subject, ...it was suggested that the Memorandum of Association would not permit of the speiter-...works being erected out of the Isle of Man. We took advice on the subject, and were ...advised that we could erect the works off the Island, but still there is a doubt on the ...subject; and we, the directors, think we should have been guilty of great indiscretion ...if we had taken decided steps in this matter without laying the particulars before the share...holders; and we might have placed it in the power of any person to do us, probably, a ...great deal of harm. We have, therefore, decided not to take any further steps in this ...matter until we have obtained the very best legal opinion in England that we can on ...the subject. If that opinion is to the effect that we can erect our works at Leith, then ...we will again bring the matter before you; but if it is to the effect that we cannot do ...so (out of the Isle of Man, then by your previous resolutions we are empowered to at once ...commence the erection of the works at Laxey. That is the position in which we stand ...in connection with the speiter-works, and I think you will be of opinion that it is better ...that we have used extreme caution in this matter, than that we should have proceeded ...with the works at Leith, and, probably, have ended in getting the company into a diffi...culty. Although we have purchased land at Laxey, yet the money will not be lost, for ...the land is in a good situation, and can be used to advantage in many ways. We must ...be nothing really in regard to our speiter-works, and we must have the best advice be...fore we commit ourselves to any step in connection with them. We have every reason ...for being well pleased with the position of the Great Laxey Mine. It is in as settled a ...state of progress and prosperity as man could wish. As is stated in the manager's re...port, we are now considering the advisability of adopting facilities to enable us to raise ...a greater amount of ore to the surface. As an instance of the richness of our mine, I may ...mention that, although we have driven 44 fathoms into the great level, yet we have not ...come to the sole. Practical miners agree that the sole should not be touched so long ...as it can be avoided, and that is in ore ground not touched, having been remarkably rich ...in the stopes above. The mine has been fairly and legitimately worked, and it will be ...found that we have not taken out a larger produce than it is necessary to take out. The ...mine is as fair a way for its prosperous continuance for many years to come as any ...in the United Kingdom. In conclusion, I now beg to move that the directors' ...manager's reports, and the accounts, be adopted.

The CHAIRMAN: It is not competent for me to move an amendment as to the dividend?——

Mr. JONES: I may state I calculate that if there had been a dividend of 17s. 6d. de...clared on the original shares, and 8s. 9d. on the preference shares, there would still have ...been a balance in hand of above 2000l., a sum which would have been a quite sufficient ...reserve in the present state of Great Laxey. The dividend I suggest would have ab...sorbed 13,500l., and would have left 2100l. in hand; I, therefore, think that a larger ...dividend might have been declared.——Mr. NOBLE, one of the directors, begged to differ ...from Mr. Jones on this point.

Mr. MELLEDEW (of Liverpool) did not wish to find any fault with the directors, who, ...he thought, had worked the mine in a manner that justly entitled them to the thanks ...of the shareholders, but he thought that the accounts were made out in a way that was ...unusual in companies of this kind. He should like to know how the sum of 500l., ...referred to in the accounts, had been expended in connection with the speiter-works?

The CHAIRMAN: That is for land bought and paid for.

Mr. MELLEDEW said that the speiter-works and the mines were two different things, ...and that they should always be kept distinct. He thought that the dividend declared was ...very large, as after it was paid there would apparently be a balance in hand of only 1265l., ...but say

and he did not think they could pay the money to anyone else. Mr. Samuels pointed out that it was a promise to pay the holder certain moneys. Ultimately the judge decided to treat the warrant as an I O U, and gave a verdict for the plaintiff, with costs.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

A moderate amount of business has been transacted in the Mining Share Market this week, and from the enquiries made for different shares, there is every probability of approximating a steadier and better market. A marked improvement has taken place in several mines, and an advance in price followed, independent of the transactions in connection with the fortnightly settlement which took place to-day (Friday).

FRONTINO AND BOLIVIA have been and continue in good demand, and prices continue to advance.—There has been a good enquiry for SETONS, and several transactions followed.—WEST SETONS are rather quiet.—CLIFFORDS have fluctuated, but show a tendency to considerably improve. — EAST BASSETS have been in good demand at advanced prices, arising from a reported improvement in the mine.—BULLERS have been dealt in, but not very actively.—WEST CHIVERTONS have been less active, but likely to greatly improve.—CHIVERTONS are quoted lower, with buyers at minimum figures.—SOUTH CONDURROWS have been freely dealt in at fair market quotations.—EAST CARN BREAS are in better demand at advanced prices, and likely to improve.—TINCROFTS have changed hands at quoted figures.—GREAT SOUTH TOLGUS shares are enquired for at buyers' prices.—SOUTH FRANCES have changed hands at nominal figures.—GREAT LAXEYS continue in good request at advanced rates, and likely to remain firm.—GREAT NORTH LAXEYS are quiet at minimum figures.—FRANK MILLS have changed hands, and are a little firmer.—WHEAL GRENVILLES have been in better demand, and prices slightly improved.—EAST GRENVILLES are less enquired for.—NORTH TRESKERBYS are more freely sought for at better prices.—NORTH ROSKEARS are rather quiet.—WHEAL ROSE shares have been dealt in at quoted prices.—HALLENBEAGLES rather quiet, and more freely offered.—GREAT NORTH DOWNS are sought for at buyers' prices.—GREAT WHEAL BUSYS have been in good demand, and from the enquiries made, with the present prospects of the mine, must considerably advance.

NORTH JANE and EAST JANE have changed hands at nominal figures.—GREAT WHEAL VORS have been in good demand at advanced rates.—EAST LOVELLS are freely sought for at much higher prices, and with every tendency to further advance.—SOUTH LOVELL shares are enquired for, but sellers are waiting for higher figures, fully expecting to obtain them, in consequence of the greatly improved prospects of the mine.—EAST ROSEWARNES are less active, but likely to improve.—TRENCROMS are sought for at buyers' prices.—WHEAL KITTY (Lelant) are also enquired for at fair market figures.—PROVIDENCE shares in request at present quotations.—TOLVADDENS have been dealt in, but prices have varied.—EAST CARADONS have been dealt in rather freely, without any material change in price.—MARK VALLEYS are rather quiet.—WEST CARADONS are less enquired for, and more freely offered.—TRELAWNY and HERODSFOOT find buyers at minimum quotations.—KELLY BRAY and PRINCE OF WALES have been done at nominal figures.—HINGSTON DOWNS have been dealt in, and still enquired for.—DRAKE WALLS have met with good enquiries, and numerous bargains effected.—EAST RUSSELLS are unusually quiet.—LADY BERTHAS have been in better request, without any advance.—CREBOR and BOTTLE HILL are more than ordinarily dull.

EAST CARADON.—The aggregate value of the ends is not so good as last noticed, arising from a temporary decline of the 80 east, on caunter, as will appear from the following:—Caunter Lode: The 70 east is worth 5*l.* per fathom; 80 east, poor; 80 west, 12*l.*; 90 east, 10*l.*, and 90 west, 5*l.* per fathom. The 70 east, on new lode, is worth 6*l.*, and 60 east 8*l.*, per fathom.

GAWTON continues to open out well in the 50, where the lode, for the portion carried, maintains its value, being still worth full 4 tons per fathom. The shaft being near the river allows of a short run of orey ground in that direction, as the ore under the Tamar is claimed by the Duchy of Cornwall, but there is a fair length on the run of the lode going east before it enters Bedford Consols.

NEW BIRCH TOR AND VITIFER.—A general improvement is reported to have taken place in several important points. The 48, on main lode, as well as the eastern end, are looking much better, and from the indications presented there is every prospect of a very great change. There are other places looking very promising for improvement, which there is little doubt of realising.

WEST CHIVERTON is reported to be looking remarkably well, rich courses of ore continuing in all the ends. The lode at Burgess's shaft maintains its size and value, being still worth 60*l.* per fathom, and the ends in the bottom level, on Williams's lode, are valued at 120*l.* per fathom. The sampling for the fortnight is calculated at 160 tons, and will further increase; consequently, larger dividends may be fairly anticipated.—CHIVERTON: The prospects of this mine are looked upon as being more than ordinarily encouraging; and, as the levels will be cleared in a few days, its completion is watched with great interest, especially as so much has been stated about the value of the ore left in the bottoms by the former company.

GREAT NORTH DOWNS.—The lode at the shaft continues large, and improving in depth, which is now down upwards of 7 fms. below the 67. The sinking of the shaft is deemed of the greatest importance, inasmuch as a junction with a south lode will, in all probability, take place a few fathoms deeper. The lode at King's shaft, which is down to the 86, has improved, and now worth 10*l.* per fathom, and driving west it is valued at the same. The lode at Sleggan's shaft is worth 25*l.* per fathom, and the bottom level averages 15*l.* per fathom, east and west. There are several other places which are looking well, and hold out considerable promise. There are several other important operations about being carried out, which, when completed, will open a long run of productive ground.

GREAT WHEAL BUSY.—The improved prospects of this mine have of late been rather freely noticed, but as they continue to become of greater value and importance as the numerous levels are being driven, and developing extensive runs of highly mineralised ground, more frequent observations may not be unexceptionable. The eastern part of the mine is opening more than an ordinarily valuable piece of tin ground, whilst the several shafts are now affording the greatest facilities for the prosecution of more extensive discoveries. It is stated by several leading authorities that by the extension of the levels at Walker's shaft, from the 36 to the 130 fm. levels east, from 4000 to 5000 tons of tin ore would be laid open monthly, and, taking the minimum quantity and quality of the work, will allow the return of full 71 tons of tin per month. Upwards of 100,000 tons of tinstuff is estimated to be already laid open in the vicinity of this shaft, and, from the average of what has been returned, may fairly calculate on realising 1562 tons of tin. It appears that the 70, 80, 90, and 100 fm. levels have passed through upwards of 30 fms. of good tin ground; and, whilst the lode is from 18 to 25 ft. wide, and the portion carried only 4 feet, it is not possible to arrive at a correct valuation of this great and productive lode. So it is evident from the discoveries already made in this portion of the mine that Great Busy will ultimately become one of the greatest tin mines in the county. No reference has been made to Wheal Daniel, which was partially worked between 50 and 60 years since, when it returned large quantities of tin from a shallow depth. Sixteen additional stamp-heads have recently commenced working, making the present total number 80 at work, which will be shortly increased to 140.

CLIFFORD.—The run which is reported to have taken place between the 200 and 220, and magnified to a most disastrous, if not ruinous matter, has been effectually cleared, and arrangements making by which the accident will prove a boon and great benefit to the company.—TRENCHOM is reported to have generally improved, and in some very important points a great change has taken place, which is likely to lead to valuable discoveries. The mine is in a profitable position, and at the coming account will show a good financial statement.

EAST BASSET is reported to have improved in the bottom level going west; the end has been looking better, and gradually improving for some time past, and is now stated to be worth from 35*l.* to 40*l.* per fathom.

SOUTH LOVELL continues to look well in all the productive places. The lode in the shaft, and also in the 10 east, is of the same value as reported last week. The lode recently discovered west of the shaft has much improved, and likely to become a very valuable acquisition; indeed, the continual discoveries which are being made leave no doubt as to the future, as a more promising adventure cannot be seen in so early a stage of operations. JAMES LANE.

From Mr. EDWARD COOKE:—There has been more *bona fide* business doing during the past few weeks than for a long time past. I mean by this that the public, attracted, no doubt, by the low price of very many good mines, have been steadily investing. Should this continue for a few weeks, a more healthy state of things will soon exist, for the mining interest, although highly important, in fact, second scarcely to no other interest, does not require so large an amount of capital to influence the market as do many of the schemes that have absorbed millions sterling during the past two years, to the utter ruin of many, and serious losses to thousands of persons who would not venture to invest 1*s.* in legitimate mining enterprise. Do the public ever reflect before making up their minds to invest in many of the financial and other miscellaneous companies, that it is not upon the market prices of these various stocks that the questionable legitimate high rate of dividends are paid, but upon the par or paid-up price? Do they ever reflect upon the chances of their being enabled to dispose of their shares again, or that they are liable to some 10*l.*, 20*l.*, or 50*l.* per share, according to the amount to which the capitals are limited? It would be invidious, or I could name many concerns, representing, in the aggregate, more capital than the whole mining interest, that have been brought out during the past two years—and actually floated—the shares in which are utterly unsaleable. I contend, therefore, that good mining property is not only safer for the investor than many of these bankrupt concerns, and that they return as large a profit, in the shape of dividends, as the best of the financial companies. Witness Great Laxey, Frank Mills, Wheal Trelawny, Herodsfoot, Tincroft, Devon Great Consols, and other mines I could mention, that are paying 10 to 15 per cent. per annum in dividends now, while the price of metals is very low. Surely they are more eligible for investment than one-half of the concerns that have been brought out during the past two years, whose business is of that mystical character that even the shareholders themselves are kept in a state of ignorance as to how the profits are made. Let us hope that a grand smash, resulting in a panic, may be averted. I fear the time will come when, to realise upon the interest held in the companies in question will be a matter of sheer impossibility. I would caution my friends to take Time by the forelock, ere the crisis comes. I am induced to make the above remarks, from the fact of being constantly written to relative to the merits of many worthless concerns, after (I fear) an investment has been made in them. A moderate amount of caution might have resulted in a saving of much money. There have been fluctuations in CLIFFORD shares. A letter received this morning, from a good authority, assures me that the late run below the 200 fm. level has been secured, and a side level is now being driven, which will take about six weeks more to hole, when the usual returns of ore will be made. There is a great improvement in the Clifford part of these extensive mines. No doubt there will be strong attempts made to keep down the price of the shares previous to the mines resuming dividends. I would advise the shareholders, before parting with their shares, to ascertain from the office of the company the true state of the mine, and not to be influenced by *ex parte* unofficial statements from, it may be, interested parties. GREAT BUSY shares have been in fair demand, and show an upward tendency in price. The large amount of tin ground laid open appears to fully justify the erection of additional stamping power. When this is done, these mines will rank among the most important and valuable ones in Cornwall, but a call may be required to erect the stamps alluded to. NORTH CHIVERTON: It will be remembered that when this company commenced operations the old shaft was completely filled in, and it has been a work of much time and great expense to clear and timber it to the 50 fathom level. This has now been done, and it is pleasing to find that below the 50 to the 75 fathom levels, or bottom of the mine, the shaft has been proved, by the dropping of a line, to be clear. This is very important indeed to the future of the mine, as it will curtail the working expenses, and enable levels to be driven without difficulty. From what has been stated by parties who knew the mine during its former working, there are good lodes of lead and blende in the 75 fathom (or bottom) levels. The future of this mine is very cheering, and, as low price shares, are well worth buying. WHEAL GRENVILLE and EAST GRENVILLE shares have been in demand, and have advanced in price, with an upward tendency. SOUTH DARREN is steadily progressing towards a dividend state, and it is anticipated that the first dividend will be made in November next. This mine has been worked fairly, with the view of its becoming a permanent dividend property, like the adjoining mine—Cwm Erfin. Before that mine paid a dividend the shares, like those of South Darren, were selling at a ridiculous low price. Surely with 3*l.* 6*s.* 6*d.* paid, and a dividend in prospective, South Darren shares are very cheap at par price, although they may now be bought at a great discount. ILLOGAN shares are well worth looking after at a low price. If they are bought, and held for six months, the calls will not exceed a few shillings per share, while there are several most interesting points to come off within that time, either of which may cause the shares to advance to pounds, instead of the present price—a few shillings per share. I am confident that the manager, Captain W. Teague, of Tincroft, is very sanguine about its future prospects.—P.S. LADY BERTHA MINE has much improved in the 30 fm. level, and it is not improbable the shares will have a considerable rise.

From Mr. WILLIAM LELEAN:—There have been some fluctuations in the markets, up and down, within the last few days, but the improvement of which I last week spoke continues, and is, in some respects, more decided than it then was. Consols and some other descriptions of stock have gone down in price, but this species of investment has ceased to be anything like an index to the condition of the money market, or to the disposition of investors or of speculators. The Threes, and even the Fives, have lost the attraction they once had, the majority of capitalists, great and small, preferring things that are paying, or likely to pay, a much higher rate of interest, albeit there may be a little risk in the transaction, from which the purchase of stock is free. In mining shares there has been a fair business done during the week, and as the advices from the Indian and American metal markets become more cheerful, of which there are satisfactory indications, the mining interest in all its branches must improve. Another thing to give an impetus to the market is the satisfactory development of some of the "progressive" mines, such as Rosewarne Consols, Chiverton, Great South Chiverton, Chiverton Moor, North Basset, South Lovell, East Lovell, Wheal Bulier, Reinnie Laxey, Great North Laxey, and some others that might be named, which hold out very cheering prospects, and give what the most experienced miners regard as unmistakeable evidence of opening out very rich. A little more activity in the metal markets, with the necessary improvement in prices, especially of tin, and the development of two or three such mines as West Chiverton and Great Laxey, for both of which events we may now pretty confidently look, will favourably affect the value of all good mining properties and *bona fide* undertakings. The continuous improvement in ROSEWARNE CONSOLS has raised a pretty brisk demand for the shares, which are going up in price. The last report from Capt. John Nancarrow, which will, I presume, appear in another part of the Journal, speaks of the decided improvement in the mine during the last month. The end in the 70 east has been improved by a part of the lode coming in from the south, making both parts worth 6*l.* per fathom, while the back is worth 12*l.* per fathom, and other points of operation are satisfactory. The shares should not be neglected just now, for a month hence they will be much higher in price. At GREAT SOUTH CHIVERTON the works at the surface, including those of the engineers, are being pushed on without any mishap, and we still rely upon Capt. Nancarrow to achieve his promised undertaking, and let us find the engine at work by the beginning of the month. EAST BASSET shares have again gone up; the lode in the 120 is still holding good, at 25*l.* per fm., with every reason to look for its continuance. WHEAL CHIVERTON shares remain pretty much as they were, as they have not yet got into the 86 end, west of Murray's shaft. It will not be many days before they accomplish this, however; and that, with the decided improvement that has been developing itself in the lode in Cookney's shaft, will, it is believed, satisfy all the expectations that have been formed of the value of the mine. At CHIVERTON MOOR they look with great hopefulness to the 40, where they calculate that they shall within four or five weeks cut the lode rich. The prospects of the mine are undoubtedly good, and the shares are to be had at a fair price. NORTH TRESKERBY and WHEAL GRENVILLE shares have both been moving, in consequence of the favourable reports on the mines; and HINGSTON DOWN shares maintain the price to which they attained upon the recent improvement in the 130, east and west of Bailey's shaft.

From Mr. J. B. REYNOLDS:—The markets have been stronger this week than for some time past, and the demand for good stock is equal to the supply, at the rates offered. Great Wheal Vor, East Caradon, East Lovell, East Rosewarne, North Treskerby, Rosewarne United, South Callington, East Carn Brea, East Basset, Great Laxey, Great Busy, Clifford, &c., have all received considerable support, and scarcely any have suffered decline worthy of notice. The state of affairs is very promising, and there are good grounds for expecting a very brisk period as the memorable year of 1865 closes. The probability is that the comparatively young mines, giving great promise, will be chiefly benefited as the markets get brisker, for the experience of the past teaches that it is seldom safe to be tempted to buy high-priced dividend stock for investment. I have often had the pleasure of calling particular attention to one of those (comparatively speaking) unwrought mining districts so valuable to Cornwall, and so full of interest to the mining world generally; and before all is said that may justly be stated in its praise, your correspondent will have long ceased, no doubt, to intrude upon your valuable space. It generally happens that one successful adventure brings to light many others; and we are not surprised that the excessive promise which SOUTH CALLINGTON holds out should have attracted attention, and that upon its very borders another distinct and seemingly influential party has commenced in earnest to seek for treasures. The more one considers the merits of the Callington district, the more one is astonished that it has been for such a length of time neglected. The success met with in the Callington Mines (from which upwards of 30,000*l.* worth of lead was taken) should have stimulated capitalists in the pursuit of further riches in this valuable locality. However, it is an excellent omen to observe at length that the South Callington shareholders have become alive to their true interests, and have resolved vigorously to prosecute an undertaking which gives as fair promise of extraordinary success as any lead mine has done which Cornwall has ever produced. It is situated about 1½ mile south of the town of Callington, in a district noted for its richness of silver-lead. It is in a line with, and in the same stratification as, the Callington Mines, and the lode is supposed to be the same as that from which upwards of 30,000*l.* worth of lead has been returned. The composition of the lode is exactly the same as the lodes in Trelawny and Mary Ann. The engine-shaft is sunk in a deep valley, through which a copious stream of water flows, sufficient to work the mine entirely by water-power. It has been sunk to a depth of 30 fathoms, at which point the lode has been intersected, and contained splendid stones of lead. Levels have been driven from this shaft into a steep hill, on the course of the lode, thus affording backs for stoping. The 12 has been driven south about 30 fathoms, and the present end of this level is within 10 fms. of a copper lode running at right angles with the lead lode. In driving the last 2 fms. of this level some fine stones of copper ore were met with, two of which were assayed, and gave a produce of 28 and 17 for copper respectively. This augurs well for the copper lode known to be a short distance ahead of that drivage. A vein of solid lead is known to have gone down from the north adit, dipping south towards the engine-shaft, which it will fall into at about 35 fms. from adit. A large elvan dyke crosses the sett, running obliquely to the copper lode, which, as well as the intersection of the lodes, is highly favourable for the production of mineral. The engine-shaft has been sunk through this elvan dyke, and is just entering a light-blue clay-slate, similar to that in the Liskeard and Menheniot districts, in which the lodes are found regular and well defined, as well as highly productive. The quality of the lead ore is very good, and is rich for silver, as may be seen from the heaps now lying on the floors, samples of which, taken indiscriminately, have been assayed, and yielded as follows:—No. 1, 15¾ lead in 20, and 37 ozs. 6 dwts. 16 grs. of fine silver per ton, worth 20*l.* per ton. No. 2, 3½ lead in 20, and 18 ozs. 13 dwts. 8 grs. of fine silver per ton; No. 3 (mundic), 4 ozs. 13 dwts. 1 gr. of fine silver per ton, worth 5*l.* per ton together. The shaft being already sunk to the 30, and the object aimed at being the development of the mine, so as to make returns at a small cost, the present operations are confined to driving the 12 north and south, to open up ground for market. To the north of the shaft a long range of lead ground is altogether unexplored, though in opening the north adit (which has been driven 30 fms.) the lode produced good work, and the bunches of lead were dipping south towards the shaft; so that by driving the 12 north up to and under the north adit a long range of lead ground will be laid open. As soon as this is done, the shaft will be sunk deeper, so as to fall in with the shoot of lead known to have gone down in the north adit, and to be dipping south, and which is calculated will be fallen in with at about 8 fms. below the present bottom of the shaft. Driving the 12 fm. level south will both lay open ground and intersect the copper lode about 8 or 10 fms. ahead. Stamps are being erected, to work which there is a water-wheel already placed; and as the dressing-floors are laid out, the ore obtained can be at once prepared for market. The facilities afforded by the neighbouring quays at Calstock, and the close proximity of the new railway at Callington, offer great advantages for obtaining the needful supplies of timber, &c., and for conveying the ores to market. The mine is in complete working order, and is abundantly supplied with plant and machinery of the best description, including count and material houses, carpenters' and smiths' shops and forge, two water-wheels (one of them 42 feet in diameter), with 220 fms. of iron rods, capstan, shears horse-whim, capstan and whim-ropes, blocks, crusher, pitwork, &c., complete. A sum of 5000*l.* has been expended judiciously in furnishing and opening the mine and bringing it to its present state; and it is confidently expected that a very small further outlay will so increase the produce as not only to pay all expenses but to give good profits.

GREAT WHEAL BUSY.—From various inspections of this property it appears quite certain the public can form no idea of the discoveries made, and the amount of reserved mineral ground laid open, estimated at 80,000*l.*, and available for future profits when Walker's drawing shaft is communicated to the 100 (to be complete by the end of November). The grant of this property is from the Right Hon. Viscount Falmouth. The agent to his lordship, Mr. Theopolis Michell, having inspected the property for his lordship, reports that the eastern part of the sett is opening out an extensive and valuable mine from the 36 to the 100; by driving these ends from 4000 to 5000 tons of tin ore will be monthly discovered, equal to 70 tons of tin per month, and that in the neighbourhood of Walker's shaft the reserves of tin ore are 100,000 tons by produce, equal to 1562 tons of tin, which at the low price of 50*l.* per ton is 78,170*l.* The great question for the adventurers to consider is to erect additional stamping power to return the great reserves of tin. Capt. Daw, of Carn Brea Mine, one of the best authorites on tin mining, inspected the mine in August, and estimates the reserves laid open to be 3780 cubic fathoms of mineral lode, which will produce 16 tons of tin ore per fathom, or a cash value equal to 77,475*l.* He further states additional stamp heads must be erected to return the tin. From these important reports it does appear no other mine in Cornwall, with the exception of Great Wheal Vor, is increasing the reserves equal to Great Wheal Busy. When the additional machinery is in operation, and even at the present low price of tin, it is calculated to work the mine at 1000*l.* per month profit. The machinery on the mine did not cost less than 30,000*l.* The mine, in 6000 shares, is selling under 4*l.* per share, or less than the value of the plant. Great Wheal Vor, in 5908 shares, is selling for 35*l.* per share, or 206,780*l.* Surely this will show by comparison a great rise must take place in the market value of Great Wheal Busy. Those who wish an investment to make money should not delay having the mine inspected. The secretary will gladly furnish inspecting orders. Unless this is done the merits of the mine will not be known to the public till shares command a market value of 20*l.* per share.

GREAT NORTH DOWNS.—It is not generally known that this mine, at its former working, returned a profit of upwards of 300,000*l.* At a depth of 40 fathoms below the deep adit, a hard bar of ground came in, which brought about the suspension of operations. The object of the present company in re-working the sett is to sink Vivian's shaft to a sufficient depth to reach the second deposit of ore, which, under similar circumstances in other mines, has always proved most productive, as, for instance, in Alfred Consols, Tresavean, &c. The engine-shaft has already been sunk more than 30 fms. through this bar of unprofitable ground, but during the last 4 fms. a most favourable change has taken place in the general character of the ground, and, from the indications now presented, the lode being 14 ft. wide, and producing splendid stones of ore; it is confidently anticipated that in a few fathoms further sinking, a course of ore will be reached. In 10 fms. deeper, Pendarves's lode will form a junction with the main lode, from which important results are expected. It may be further mentioned that this shaft is 460 fms. from King's shaft, and it is regarded as a most significant feature that if the workings in the former (Vivian's) shaft are suspended but for a few days, the water rises in King's shaft, showing that there must be a large spongy lode for 460 fms. long. The discoveries, too, made at Sleggan's shaft, where there is a lode worth from 25*l.* to 30*l.* per fathom, and which same lode has been intersected at King's, close to Wheal Rose boundary, and at 10 fms. deeper than at Vivian's, would seem to leave no doubt that in a few fathoms deeper, the second or great deposit of ore will be found. At Wheal Rose there is a lode worth from 30*l.* to 50*l.* per fathom, close to the boundary of Great North Downs, and as King's shaft is down to the 86, it is proposed to cut through the lode, and drive under Sleggan's shaft, which will give 15 fms. of reserves in depth, and the agents believe this step will open up a considerable amount of valuable ore ground. The mine has recently been inspected by Capt. Rich, who considers its prospects everything that could be desired, and especially at the eastern part, adjoining Wheal Rose. As the lode there is intersected in Great North Downs a few fathoms deeper. The number of lodes to traverse this sett, and being intersected by fine cross-courses, very naturally lead shareholders to hope that in a short time Great North Downs will arrive at a highly profitable condition, and that the second deposit of copper will prove even more profitable and permanent in its character.

CLIFFORD AMALGAMATED MINES.—The following account of the present and future prospects of these mines may not be uninteresting to the public:—At the meeting in October there will be about 2000*l.* balance against the company. The December meeting will show a profit upon two months' working. The February meeting will show that the above 2000*l.* will be cleared off by the returns, and in April next dividends will be resumed again. Clifford, or eastern portion of the mines, has considerably improved since the last meeting. The above may be relied upon as being substantially correct, and from what would appear that, to sell the shares after a drop of 10*l.* per share, is an imprudent thing to do. A debit balance of 2000*l.* against a property of the magnitude of Clifford Amalgamated, is comparatively trifling.—EDWARD COOKE.

FOREIGN MINING AND METALLURGY.

A French provincial journal contains the following announcement:—"If we quit Longwy in order to pass into the Meurthe, we find MM. [illegible] demolishing the Novéant establishment in order to transport to Liverdun! Demolish Novéant in order to re-construct it at Liverdun! It is not believed;" but it is not so very incredible after all. The treaties of commerce with England and Belgium place the ironworks of France in a critical situation. A good many of them are expected to succumb under the influences of competition; some will carry on the struggle with difficulty; a small number of them will still succeed and realise good profits, while others will have difficulty in staving off ruin. This future of prosperity is reserved only to localities which unite the advantages resulting from the low price of raw materials and the cheapness of means of transport. The small town of Liverdun, with its 900 to 1000 inhabitants, enjoys this double industrial position, and presents special advantages. Liverdun possesses an extensive ironstone working called the Hazotte concession, which extends from the east to the west along the whole length of the Moselle, under the communes of Liverdun and Pompey. The gallery of Liverdun can divert its products at pleasure—first, on the canal from the Marne to the Rhine, boats on which can take on board the minerals as they leave the subterranean gallery; secondly, on the Moselle, which can receive the products from the very trucks of the galleries; and thirdly, to the nearest station on the Eastern of France Railway, which is within a very convenient distance. If MM. Barbe, who pay at Novéant a high price for forging pig, think of placing blast furnaces on the right bank of the Moselle, or of the canal from the Marne to the Rhine, or better there two fluvial communications, the furnaces would be supplied with minerals at the greatest ease, and without any engines, while outlets would be readily effected by river, canal, or railway. While the communes of Liverdun would supply the furnaces with minerals and castina taken on the spot and without transport expenses, the carriage from the Marne to the Rhine and the Eastern of France Railway which passes at the foot of the concession would bring to works established in the neighbourhood the coke of the Nord or Prussia, at very reduced rates, especially the latter after the completion of the collieries canal. Loaded boats or trucks could penetrate to the very centre of the establishments, an arrangement which would annihilate the immense mass of transport expenses, loadings and unloadings, which ordinarily burthen the raw materials and manufactured products of works placed even at small distances from railway stations. It is believed that MM. Barbe will find at Liverdun minerals at 2*s.* 11*d.*, and coke at 18*s.* 6*d.* per ton. It requires rather more than 3 tons 6 cwts. of mineral and 1 ton of coke to produce a ton of refining pig in this district, establishing the calculations on furnaces producing annually 30,000 tons of pig. Let any man, familiar with the manufacture of pig, establish calculations on these data, and he will arrive at a return of 2*l.* per ton.

The furnaces of the Moselle maintain the price of refining pig at 5*l.* per ton, and it is affirmed that on these terms there is no great profit for the producer, while there is no hope of seeing it increase, especially when new furnaces come into operation—indeed, it is added, that it will be considered a fortunate circumstance if competition does not bring about a fall. Works at Longwy are making good progress. M. Labbé has erected a third furnace, and the success attributed to him of devoting himself to the production of grey pig for second fusion purposes; he has at his disposal Athus minerals, which will enable him to obtain a pig rivalling the best pig of Scotland and Belgium. It is anticipated that M. d'Adelsward will light his first blast-furnace in the course of this month, or in October at the latest. M. Gireaud is about to erect two blast-furnaces, one considerably larger than the other. Moulaine is sold to some forgemasters of the Ardennes. M. d'Huart is, it is said, about to devote himself to the manufacture of pig. Some great industrials are at the head of an affair at Rehan, which proceeds very well; finally, at Cons-la-Grandville, the forge is being actively pushed forward of works belonging to the old Herserange Company. On the other hand, besides the movement which is being effected at Liverdun, of which we have already referred, a third furnace is being established at Frouard. M. Sepulchre is establishing two blast-furnaces, both near Nancy. M. Lesurg, of Nord, is constructing another blast-furnace, and will, probably, also establish a rolling mill. At St. Dizier, the situation has not greatly changed. There is a good current of affairs, but it is, nevertheless, less active than it has been for several weeks past. Charcoal-made pig has remained without transactions. The rolling-mills are well supplied, especially with hoops and sheets. A new common tariff of the Eastern of France and the Northern of France Railway Companies, to which allusion was recently made under this head, has just appeared; it was submitted for official homologation on the 1st. The Eastern of France reduces its rates for the conveyance of coal and coke to 1*c.* per ton per mile, the terms previously in operation on the Northern of France. The reduction has been received with much satisfaction; it is very acceptable, as difficulties had arisen with the boatowners on the rivers and canals.

On the French market copper appears to be more and more neglected, and maintains itself with difficulty at quotations previously indicated. Chilian remains neglected on the Havre market, and the few wants which appear among rollers are supplied by sales from Swansea at 77*l.* 10*s.* to 80*l.* per ton delivered on the spot—a price which holders at Havre do not like to accept. The sale is mentioned of a lot of 3 tons of Lake, Quincy mark, at 96*l.* per ton. The stock at Havre, Aug. 31, was composed of 90 tons United States, 4700 tons of Chilian in bars and ingots, and 100 tons from miscellaneous sources, making a total of 4890 tons, or of pure copper about 4700 tons, against 4600 tons July 31. At Paris prices have been feeble. The Rotterdam market has been quiet, with but little demand; Dunkirk has made 56 fls., and United States 53½ fls. There is more firmness on the German markets, but, speaking generally, affairs have little animation. At Hamburg there has been little demand for ordinary descriptions; choice qualities, especially Russian, more in favour, and maintain themselves at an advance. At Berlin there have been few modifications in prices; the Cologne and Stettin markets have remained quiet, and prices display no sensible variations. A slight revival has appeared in tin at Amsterdam and Rotterdam; on these latter markets Banca tin is held more firmly, at 34*l.*, while Billiton remains firm at 54 fls. The article remains quiet, and is quoted nominally at former rates at Paris and on the various German markets. Some blocks Banca, for the strict requirements of consumption, have found purchasers at 1*l.* above previously-quoted rates. At Paris the demand for lead has been insignificant; the price French is quoted by continuation at 19*l.* 8*s.*, and Spanish, 23*l.* 8*s.* per ton. During the whole of the past month one lot only of Spanish was dealt in on the Havre market; this sale was effected at 19*l.* per ton. Advices from Hamburg report a greater firmness on the part of holders, although the demand is moderate. At Cologne the article is firmly held, and at Stettin it has also been in better demand. From Hamburg scarcely any affairs are mentioned; on the other hand, the disposable stock has become much reduced, and an advance would have to be paid to meet consumptive requirements. Breslau and Paris markets have also been inanimate; on the latter, rough Silesian dealt in by continuation at 23*l.* 4*s.* per ton.

As regards Belgian metallurgy, we learn that a contract for 2000 tons of rails has been recently concluded for Spain by MM. Dorlodot and Co., of Monceau-sur-Sambre Company. The rolling-works of MM. Baillet and Co., at Marchienne-au-Pont, are reported to be in full activity. The Montigny-sur-Sambre Company, which sends part of its iron abroad—some to England—has just prepared a tariff, which indicates a tendency to a fresh advance. This tariff, however, proves nothing; producers have a natural desire to obtain high prices, but are consumers of the same way of thinking? The situation has remained without material variation in Belgium. At the same time, the condition of the summer season is awaited with hope. At Charlerol prices are sustained with effort, and the works are sufficiently provided with orders. A question which again come under consideration is the constitution of a committee of forgemasters on the French system, and to some extent, also, after the English. It is contended an absence of a proper understanding among industrials is prejudicial as well to the chaser as to the seller. The services which a committee of forgemasters could are evident and undisputed; but the question, it is to be feared, is still far from solution. It is what is called a "summer question," intended to occupy attention in the dead season, while not a trace of it will be left as soon as the autumn has set A letter from Liége says:—"Selessin, Ougrée, and our other establishments, have orders than they can execute; prices are pretty good, and an advance is probable great difficulty which weighs upon all the establishments is a want of labour. average price of merchants' iron is 6*l.* 16*s.* per ton at the works; for export the same, delivered at Antwerp. White refining pig for merchants' iron realises 3*l.* 4*s.* per ton. There are no important contracts in sight." The Administration of the Netherlands State Railways offers to public adjudication a new contract for 2000 tons of rails. The Belgian General Company for Lighting by Gas has just ordered in Belgium the complete plant for the whole of the important works which this company has on hand at Catana in Sicily, as it had already done for its establishments at Naples and Rimini. The pipes for the canalisation at Catana comprise a total weight of 834 tons, and they will be supplied by M. Cambier, of La Louvière, who received not only Belgian competitors, but also several English founders, who had presented favourable conditions. The General Gas Company is also about to make extensive for supplying its works in Italy with Belgian coal. The Vezin olivine furnaces blast-furnaces are quoted at 11*s.* 3*d.* per ton on trucks at Namur. Advices from many report the granting last month of a patent for an automatic alternative rolling to Herr Dallen, director of siderurgical establishments at Lenderdorf, near Dusseldorf, present an alternative rolling-mill requires the employment of a trained workman, according to the system of Herr Dallen it will work alone, and, it is also stated, regularly. If this is the case, the invention is a great progress realised. It may be referred that in Germany, at any rate, it is considered a really progressive improvement, since it has received the honours of a patent, which is not easily obtained. Belgian coalowners are rejoicing, as alleged invention is considered without merit. The dead season may be at hand, they may, at their prospects for the ensuing campaign. The dead season may be at hand, considered at its height, but, nevertheless, decidedly active, and stocks do not exceed, is scarcely any stock, and an advance in price is considered imminent. A Liége letter states that coal continues in good demand, to acquire importance.

The Luxembourg Mines and Sarrebruck Forges Company will hold a general meeting on Tuesday, Sept. 19, at Burbach, near Sarrebruck; the Sart-Culpart Colliery Company will meet on the same day at Paris; the Gilly; the Plan d'Aups Mining Company will meet on the same day at Paris; the Ahun Collieries Company on the same day at Paris; the Nord Colliery Company, Metallurgical Company of the Asturias on the same day at Paris; the Stiring Collieries Company on Tuesday, September 19, at Stiring-Wendel, in the Moselle. At the annual meeting of the Toula Forges Company (Belgium) the report read indicated that the undertaking was in a

...ake position. The dividend was fixed at the rate of 10 per cent. per annum, and a ...of 2000*l.* was added to the reserve.

FOREIGN MINES.

RICHMOND CONSOLS.—G. Sweet, Sept. 9: The north lode, at Bliebach, ...the plan of intersection in the 10, is worth from 10 to 12 centners per lachter, and ...that as it gets off from the kluft it will prove more productive. No. 1 winze ...lachters deep, and will be holed in a few days, when we shall commence stoping ...the winze, and start a new winze 20 or 30 lachters further west, where the lode ...ford. We have not yet met with the south lode, though we have extended ...ardson on the course of the kluft, and the cross-cut is within a lachter of the ...workings above, so that if the lode makes no underlie in depth we shall reach it ...shortly. The delay in finding the lode, no doubt, occasions great anxiety, and no ...can be more anxious about the matter than myself. I am sorry to say the weather ...again become too little to drive the wheel at Christiania, and in consequence we ...doing nothing there except getting the dressing-floors in order. The weather ...at present is very warm and dry. The dressing-floors at James Watt are almost ...ished, and as soon as the plunger-lift is fixed to raise water we shall commence ...ling ores. The bob-pit, &c., is almost ready, and on Monday next I intend going ..., and remaining till it is fixed, which will, I trust, be done by Thursday next. ...have 23 tons to sell for August, and I hope to get for this month from 30 to 35 tons.

LANTANIAN.—Sept. 1: In Taylor's engine-shaft the lode is 3 ft. wide, ...posed of quartz, mundic, and copper, worth for the latter 2 tons per fathom. Perez' ...is deep enough for the 50 fm. level The lode in Domingo's winze is worth 1 ton ...fathom. In Oak shaft the ground is without alteration. The lode in the 90, east of ...ard's, is 20 in. wide, composed of quartz and the country. In the 90, west of same ...e, the lode is composed of quartz and a branch of ore, worth ⅛ ton per fathom. ...lode in the 80, east of same shaft, is worth ¼ ton per fathom. In the 80, west of ...shaft, we have cut a branch crossing the end, and we have begun to drive east on ...which we suppose to be the Mill lode, but it is very far north, and unproductive. In ...71, east of River shaft, the lode is composed of flookan. The lode in the 70, west of ...ard's, is composed of flookan and stones of ore. The 18, west of Perez' shaft, is com...of quartz and ore. The lode in the 70, west of River shaft, is composed of flookan ...a little ore. The 50 cross-cut commences at Taylor's shaft, where the ground is of ...of gneiss. The ground in the 60 cross-cut is very hard. In the 28 cross-cut the ...and is exceedingly hard. In the 28 cross-cut, south of Slide lode, the ground is a ...is improved. Tavara's winze is down to the 70, and the men put to drive west. In ...70, west of Tavara's winze, the lode is composed of flookan and a branch of ore, ...¼ ton per fathom. The rise against Laurenco's winze is holed. In the 20, ...of Oak shaft, the lode is composed of quartz and crystals of blende. The stope ...the 50, east of Laurenco's winze is worth ¼ ton per fathom.—Stopes: The stopes ...the 12, west of Perez' shaft, are worth ½ ton per fathom. The stopes above the ...east of River shaft, are worth 1 ton per fathom. The stopes above the 60, west of ...ard's winze, are worth 1 ton per fathom. The stopes above the 30, east and west ...ard's winze, are worth ¾ ton per fathom. The stopes above the 80, west of Taylor's ...20, are worth 1 ton per fathom. The stopes above the 80, east of Taylor's shaft, are ...20 tons per fathom. The stopes above the 70, between Taylor's and River shafts, ...worth 1 ton per fathom. The stopes above the 70, west of Taylor's shaft, are worth ...ton per fathom. The stopes above the 90, east of Taylor's shaft, are worth 1 ton per ...fathom. The stopes above the 60, east and west of Dia's winze, are worth 1½ ton per ...fathom. The stopes above the 50, east and west of Norte's winze, are worth 1 ton per ...fathom. The stopes above the 50, east and west of Machado's winze, are worth 1 ton ...fathom. The stopes above the 60, east and west of Jacinthro's winze, are worth ...ton per fathom. The stopes above the 40, west of Slide winze, are worth ¾ ton ...fathom.—Carvalhal Mine: The lode in the incline shaft is still going wider, by rea...of the south branch going down right; the shaft is now 11 ft. wide; each of these ...ches contains lead, and between them is a run of country; the composition of these ...ches is quartz and lead, being worth for the latter 1¼ ton per fathom. In the 20, ...of incline shaft, the lode is spotted with lead. The 20, east of said shaft, is also ...ded with lead. The lode in the 10, west of incline shaft, is 10 in. wide, composed ...quartz and flookan, with small stones of lead and blende. The lode in the adit, west ...of shaft, is small and unproductive. The lode has not yet been taken down in Jose's ...ge, but where we have broken it, it shows small crystals of blende.

VAL TOPPA.—W. Jenkin, Sept. 6: Piedimulera: Through the scarcity ...water we can run only 88 mills per day. The quantity of amalgam obtained during ...past four days is 1008 grammes, and during July and August 15,151½ grammes. ...Mines: The stopes in Marmo Rosso level are looking very good; the lode is 4 feet ...de, yielding ore worth 1½ ozs. per ton. The lode in the stopes behind this end is ...wide, yielding similar ore. In the stopes in back of John Fisher's level the lode is ...ft. wide, producing average ore. The stopes in the side and bottom of this level ...continue to yield large quantities of ore, which we find to be of an average quality. ...work at the new establishment on the River Anza is progressing very favourably.

VAL ANTIGORIA.—T. Roberts, Aug. 31: Crodo: Our surface work is ...pressing favourably. All the rail roads necessary for the present have been laid. ...barracks for our miners and smith's shop have been completed. The carpenters ...t for the office and the material room will in the course of next month be also ...leted. The new mill house will be commenced in the course of a month. Our pro...ts underground continue to be very good. The lode in the end of the 20, driving ...th, is yielding ore worth per assay 1 oz. of gold per ton. The lode in the end of the ...driving north, is of a beautiful nature, and rich in gold. At this level, and driving ...th, we have a good, promising lode, and are leaving in bottom of this end a lode ...in gold. The lode in bottom of new winze, on No. 3 lode, is yielding 2 tons of ore ...fathom, worth per ton per assay 1 oz. of gold. The ore extracted by driving the ...is being amalgamated with the old mills, and is giving an average yield of gold, ...ich shall be forwarded next week.

VALLANZASCA.—Sept. 6: The manager writes as follows:—"Since our ..., thirteen of the new amalgamating mills have been started, and up to this date have ...amalgamated 160 tons of ore, yielding 26·673 grammes of amalgam. By the end of this ...onth sixteen mills will be working. During the greater part of last month only seven ...ills were at work, as the levers, &c., required for the machinery did not arrive from ...Sandry as soon as promised. When the full number of ten mills started the daily ...ields of amalgam increased at once, and the yield for August is about 120 ozs. of gold, ...giving a considerable profit over working expenses. The returns for this month will ...show a considerable increase on this quantity, as it will be the result of the working of ...fifteen mills."—James Roberts: "We are pleased to report that ten of the new ...amalgamating mills have been started, and have amalgamated to date 160 tons of ore, ...yielding 26·673 grammes of amalgam. The three old trial mills and fifty native mills ...are daily at work, and yield also a fair quantity of amalgam.—Mines: An improvement ...has taken place in Mazzeria level; the lode at this point is 3 ft. wide, worth 1 oz. of ...gold per ton of ore. The lode in the stopes in the back of Cava Vecchia level is 6 feet ...wide, and worth 1¼ oz. of gold per ton. The stopes in the bottom of this level are ...yielding large quantities of average ore. At Sasso-Nero, the lode in the bottom con...tinues to yield a large quantity of rich ore also. The supplies of large quantities of ore ...to the amalgamating machinery are very great, and with the completion of more mills ...we shall not fail to increase the production of gold."

CENTRAL AMERICAN.—Alotepeque, July 31: San Pantaleon Mine: In ...the Guadalupe, or 10 fm. level cross-cut, below San Alfonso deep adit level, driving ...north towards the heaved portion of the lode, the ground in the past month has been ...rather more favourable for timbering, a large stream of water having been cut, which made the ...ground heavy. It is expected to reach the lode in about a fortnight from this date. The ...lode in the rise above San Alfonso deep adit level is 2 ft. wide, containing spots of ore, ...but not to value. It is expected to communicate with San Felipe level by the end of ...August. In the new cross-cut, driving south from the foot of the hill, east of the eastern ...cross-course, the ground is without alteration. A branch has been passed through, not ...worthy of note. The lode in the stope No. 5, below San Juan level, has a little fallen ...ore in the latter part of the month, but is still worth from 5 to 6 cwts. of fair quality ...per ore per vara—about 12 cwts. per fm.—San Carlos Mine: In La Esperanza deep ...adit level, driving east of the cross-cut, on Carrera's lode, the lode is now 1 foot wide, ...unproductive, but in the past month pockets of ore have been found, but not enough to ...pay. In San Rafael adit level, driving east, Carrera's lode has somewhat improved in ...the last 2 or 3 varas driven; it is now 1 ft. wide, composed of flookan, calc-spar, and ...mundic. Capt. Butler holds out hopes of a speedy change for the better in this end. ...In Garcia's winze, sinking below San Rafael adit level, Carrera's lode is small and un...productive, and is in disordered ground. The lode in the stopes above San Rafael adit ...level is worth on an average from 6 to 7 cwts. of silver ore of fair quality per vara, or ...about 14 cwts. in a fathom. The lode in the trial stope below San Rafael adit is un...productive, and the stope is suspended. Duarte's lode has been seen in a surface ex...cavation on the eastern side of the mountain, about 100 fms. from the present workings, ...but is not promising at this point. On the western slope of the hill, towards San Pan...taleon, search is being made for outcrops of the lode or lodes, but hitherto without meet...ing any of a promising character. A branch is reported to have been met with letting ...off water, and would be further examined.—Returns: San Pantaleon produced in July ...7 tons 10 cwts. of silver ore, averaging 79·6 ozs. per ton=1234 ozs.; San Carlos, 27 tons ...2 cwts., averaging 73·8=2029 ozs.; making a total for five weeks of 43 tons=3263 ozs. ...The estimate of raising for August (four weeks) is from San Pantaleon 12 tons, San ...Carlos 24 tons=36 tons.—Hacienda de San Jose: The reduction and other operations ...within this establishment have been carried out with regularity during the past month. ...During the month of August the crushing, and consequently the furnaces, would be ...stopped, to allow of the replacing of the old water-wheel by a new one, but in September ...the agent expects to compensate this by working four barrels with ore for nearly all the ...month. The 27th conducta would be dispatched to Guatemala on Aug. 7. It will ...comprise 11 bars of silver, of the approximate value of $9000.

TRADE WITH FRANCE.—According to an official paper just issued, the ...value of merchandise imported into England from France was in the first half of the ...present year 12,817,179*l.*, whilst our exports only amounted to 4,374,619*l.*

PETROLEUM.—The imports of petroleum appear to have been almost ...suspended in July. In that month only 5 tons were received, as compared with 2241 ...tons in July, 1864, and 3259 tons in July, 1863. The 5 tons which came to hand in ...July were from the United States, while in July, 1864, the receipts from the same ...quarter were 2140 tons, and in July, 1863, 3134 tons. In the seven months ending on ...July 31, this year, the imports of petroleum have been only 3652 tons, as compared with ...7593 tons in 1864, and 24,320 tons in 1863 (corresponding periods). The great decline ...in imports is traceable almost entirely to the diminished deliveries from the United ...States, from which only 3026 tons were received to July 31 this year, while the arrivals ...from the same quarter were 6538 tons in the first seven months of 1864, and 23,200 tons ...in the first seven months of 1863.

The Trinidad Petroleum Company have during the week received two ...cargoes (2300 tons) of asphaltum from Trinidad.

MINE ACCIDENT.—A fatal accident occured at Condurrow Mine, Cam...borne, under the following circumstances:—A miner, called Lister, in company with ...two others, named Jewell, father and son, were descending to their work in the skip, ...when the chain broke, and they were precipitated down the shaft. Lister was killed ...on the spot. Deceased was 21 years of age. The other two were only slightly injured.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the ...week ending September 10 was 12,569*l.* 10*s.* 8*d.*

HOLLOWAY'S PILLS AND OINTMENT—BE NOT DECEIVED.—There is a ...giant marching onwards from the East, who threatens to invade our prosperous country ...—his name is Cholera, and his cohorts consist of Impurity, irregularity, debility, and ...despondency. Each of these provocatives of this dire disease may be treated success...fully and subdued completely by Holloway's remedies, provided they be resorted to with...out delay the moment listlessness, looseness, feverishness, or pain, betrays disordered ...action. The directions will enable the least cultivated to treat successfully and subdue ...completely those warning symptoms of cholera. When confidence in Holloway's prepa...rations has once been established, each believer in their virtues will humanely recom...mend them to his acquaintances, that none may foolishly harbour the foe's friends within ...his own fortress.

ORE DRESSING MACHINERY—No. I.

In alluding to Mr. Hilary Bauerman's descriptive catalogue of the geological, mining, and metallurgical models in the Museum of Practical Geology, we remarked that the task had been so admirably performed that considerable information was obtainable from the book itself, even where the reader is unable to pay a visit to the Museum to inspect the models. We now propose to give some extracts from the chapter devoted to the consideration of the machines for the dressing of minerals.

The Crusher is a machine used for breaking down minerals into a coarse powder, suitable for jigging or other dressing processes; it is also employed for reducing clean ores into powder for the smelter. For all substances of medium richness and hardness, especially in the case of lead ores, it possesses great advantage over the stamps when combined with a proper classifier, as its work is done dry, and therefore the loss by the diffusion of finely divided ore through large quantities of water in the form of slimes is avoided. The crushers usually employed at the present time consist of a single pair of cast-iron cylinders placed horizontally and nearly in contact, coupled together by spur wheals of equal diameter, so that their surfaces revolve towards each other at an equal velocity. Rollers with projecting teeth are employed in a few instances, but they are by no means as common as the plain form.

CRUSHER AT TWARNHAILE MINES.—The rollers of this machine are of unequal lengths, the driver being 24 in. and the follower only 18 in.; both are of the same diameter—namely, 27 in. They are formed of thick cast-iron shells, keyed on to cylindrical bosses, on a pair of plain shafts, which have couplings outside their bearings, connecting them with a pair of lighter shafts, carrying the gearing wheels. The bearings of the shorter roller slide between parallel guides, and are kept in position by round bars passing through holes in the frame, which are pressed against by the shorter arm of an unequal armed bent lever, whose longer arm carries a loaded box; the relation of the two arms to each other is as 1 to 9. The object of this arrangement is to save the rollers from fracture in case any unyielding substance should get between them, for when the resistance of any fragment is greater than the horizontal thrust exerted by the loaded arms on the bearings, the shorter roller slides apart from its fellow, and opens a passage for the unbroken substance to pass through. The broken material passes into a tubular or drum sieve, 42 in. long and 24 in. in diameter, whose axis is set at an angle of 25° to that of the driving roller, with which it is connected by a pair of bevil wheels; the smaller wheel on the sieve shaft, having 11 teeth, receives motion from a larger one of 40 teeth. The gauze has six apertures to the square inch; the particles passing through are received in a box, closed by a door, through which they are loaded into a truck on the railway below; the coarse fragments are thrown out into the buckets of the raff wheel, or lifting wheel, which resembles a reversed water-wheel, being closed on its outer circumference, but provided with a ring of buckets opening inwards; it is 15 ft. in diameter, and being coupled to the driving roller makes the same number of revolutions; it discharges its contents on a floor immediately adjacent to the feed hopper, to which they are returned to pass a second time through the rollers. A crusher of this size makes from 30 to 50 revolutions per minute, requiring an effective driving power of from 12 to 20 horses, and will break down a quantity of ores varying from 40 to 60 tons per day, according to the hardness of the associated gangues.

CORNISH CRUSHER FOR COPPER ORES (OLD PATTERN).—This is a small crusher, driven by an overshot water-wheel, with an intermediate train of spur gearing. A cross-bar is inserted behind the bearings of the loose roller to receive the pressure of a single balance lever in the centre, instead of using a special weight for each end. The broken stuff is discharged sideways down an inclined shoot into the drum sieve, whose axis is placed at right angles to that of the rolls, and is driven by a special train of gearing wheels. The coarse fragments are thrown into a rectangular box or kibble, which moves between wooden guides, and when filled it is lifted up by a rope winding on to a windlass barrel fixed above the rollers; the shaft of this windlass is slung to the end of a lever, by which it can be lifted out of gear. A coiled spring attached to the plummer block of the loose end keeps it in position when in use. The rollers make four revolutions for each revolution of the water-wheel.

DERBYSHIRE HAND CRUSHER.—This is used in the small lead mines of Derbyshire when only a few hands are employed. It has two plain rollers of cast-iron, 2¾ in. in diameter and 8 in. long, geared together by spur-wheels in the usual manner. The loose roller is not balanced by weights, but is kept in position by setting screws acting on the outer face of the bearings. The ore is supplied through a hopper, 12 in. square at the top, to which is hinged a shallow inclined tray, with two projecting arms, terminating by convex bosses at the lower end; these bosses rest on the outer faces of the gearing wheels of one of the rollers, and are set in vibration by the teeth as they pass; this gives a jerking motion to the tray, bringing a fresh supply of ore continuously to the roller. The broken stuff falls down an inclined plane into a dish made of sheet-iron placed for its reception below.

IRONSTONE CRUSHER.—This is a pair of rollers, studded with coarse blunt teeth, arranged in a spiral form around their circumference. It is intended for breaking ironstone into coarse fragments, in order to facilitate the separation of intermixed argillaceous matter.

The Stamping Mill is the machine generally employed for reducing minerals to a state of division sufficiently fine to allow of the classification of their component parts by the action of water. It consists essentially of a series of vertical beams, shod with masses of wrought or cast iron, called stumps, which are lifted by cams fixed on the circumference of a rotating barrel, and allowed to fall on the fragments of ore beneath them. The powder or coarse sand produced by the stamps is removed by a current of water passing through the stamp-box or coffer, the discharge taking place either through a perforated metal plate, a grating of bars, or by the swell of the water over a thin-edged board or weir; this last form of stamps is known as a "flasher."

CORNISH STEAM STAMP.—This is the original arrangement of the stamps at Carn Brea Mine, Cornwall, but it is no longer in existence, having been replaced by a more powerful set. The stamp-heads are 72 in number, divided into two lines of 36 each; the steam-engine is placed between them, and drives the cam barrels by a pair of short shafts, each carrying a fly-wheel, which are coupled together by the pin of the driving cranks. The stamps work in sets of three, divided from each other by upright pillars, to which are attached thick oaken planks, forming a closed box or coffer to a height of about 20 in. from the ground. The ores to be stamped are introduced, together with a stream of water, through a square hole in the hinder wall of the coffer, whilst the finely divided material is carried out by the stream through perforated metal plates on the front wall. The stamp-head is a mass of white cast-iron, of an irregular prismatic form, furnished with a tapered projecting tongue at its upper end, which is sunk into a corresponding socket at the lower end of a vertical timber beam, called a lifter, and is secured in place by two narrow wrought-iron bands. The lifter moves vertically between two pairs of parallel guides, which are attached to transverse bars uniting the dividing pillars of the sets together, a wooden tongue projecting at right angles from it about midway between the guides receives the action of the rotating cam shaft. Each head is lifted five times in every revolution of the engine. The cams are made of cast-iron, shaped to an involute curve, having wedge tails, by which they are keyed into their sockets on the cam barrels; the latter are hollow cast-iron cylinders, with flanged ends, united together by screw bolts; the journals are attached by covering plates, similar to those of the large Cornish water-wheels. A simple disengaging clutch is introduced in the middle of each line, dividing it into two parts, each of 18 heads; the ends nearest to the engine are connected with the driving shaft by ratchet couplings, an arrangement which allows the engine to be run independently of the stamps if necessary; its chief object, however, is to prevent the possibility of the cam barrels being turned in the wrong direction, if by mistake the engine should be reversed by the driver at starting. The bed on which the stamps work is formed of a hard quartzose stone, stamped in a dry state to a depth of 18 in. between longitudinal walls of masonry. The ores, broken into lumps of about two cubic inches volume, are brought in wagons along a railway raised about 10 ft. above the ground, running parallel to the whole line, and a short distance behind it, and are received in large hoppers with inclined bottoms leading into the backs of the stamp coffers. The descent of the lumps is effected partly by their own weight, partly by the general shaking set up by the falling stamps an the framing, and partly by the action of the water, which is introduced near the outlet of the hopper. In the year 1857 the Carn Brea stamps included 96 heads, divided into sets of four, each one weighing 660 lbs., and striking 44½ blows per minute, with a fall of 9 in., the driving shaft making 8½ revolutions in the same time. The motive power is furnished by a single acting high pressure condensing steam-engine, with an unequal armed beam; the steam piston is 32 in. in diameter, making a stroke of 9 ft.; the radius of the crank is only 4 ft. The two fly-wheels are each 20 ft. in diameter. Each head will stamp about 200 tons of ore per annum, or about 13 cwts. daily (in 24 hours); the amount of water consumed is about 3 gallons per head per minute. The discharging grates are plates of copper, perforated with holes of 1-30th or 1-40th of an inch in diameter. The weight of the stamps employed in other tin mines in Cornwall varies from 3½ to 7½ cwts., the lighter ones being usually employed where water is the motive power. The height of lift is from 9 to 10½ inches.

STAMPS AT PAR CONSOLS.—This model represents a set of four heads without the cam barrel. The lifters are made of rectangular balks of Norway fir, with wrought-iron tongues and guides; the latter are formed by two pairs of triangular prisms of an equilateral section, one edge being turned outwards, they rub against planks of soft wood attached to the cross bars of the framing. The shorter sides of the coffer, as well as the front, are provided with discharging grates, formed of perforated iron plates; each of these rest against an iron backing, lining the aperture on the inner side of the box, and is kept in position by a wrought-iron pressure frame, secured by a cross bar resting on two arms projecting from the outer side of the coffer. The front grate is of extra large size, measuring 23½ in. in length by 7 in. in height. The weight of the stamp head complete is 5¾ cwts.; the lift is 10 in.; the number of strokes per minute 50. A double cylinder engine, on Woolf's principle, of about 50 effective horse-power, is employed; it moves 76 heads, of which 68 are worked on tin and the others on copper ores; 20 are flashers, and the remainder stamps through grates. The ore stamped by each head is 265 tons per annum, or about 27 per cent. more than the yield per head at Carn Brea; the ore contains chlorite in considerable quantity, yielding about 1·25 per cent. of metallic tin. The sandy mud passing out through the grates is received in a rectangular channel, called a strip; there are two of these for every set of four heads, which are in use alternately, one being cleared out while the other is filling; they are of the following dimensions:—12 ft. long, 14 in. broad, and 12 in. deep, with a forward slope of 1 in 72, or 2 inches in the length. The reputed density of the material collected is 1·3, this would give a weight of about half a ton for the contents of one strip when filled, or 14 cubic feet at 80 lbs. The filling takes place in 12 hours, during which time the four heads in the set will have worked through 2 tons of the ore; the sand deposited in the strip amounts, therefore, to about 17½ per cent. of the weight of the ore originally treated. The finer materials retained in suspension by the water are collected in large basins, called slime pits.

Died,—On Aug. 15, at Tucacas, of fever, Capt. Browne (late of Redruth, Cornwall), manager of the Quebrada Mines, Venezeula, South America. Capt. Browne was an experienced miner, and his death is much regretted by all with whom he was connected.

Science and the Navy have lost a distinguished man in Admiral William Henry Smyth, the eminent hydrographer, who has just died in his 77th year. One of his sons, Mr. Warington Smyth, is well known for his connection with the Mining Institute, in Jermyn-street; and another, Mr. Piozzi Smyth, is Astronomer Royal for Scotland.

Mining Correspondence.

BRITISH MINES.

ABRAHAM CONSOLS.—J. Vivian, H. Cowling, Sept. 14: We are still progressing with Sales' engine-shaft with six men; we are down from 6 to 7 fms. Our tributers have been raising some good work for tin on our engine lode, but they are obliged to abandon their pitch on account of the water. There is a good lode of tin gone down at a depth of 6½ fms., and as soon as the water is drained there will be tribute pitches to be let immediately.

BAGTOR.—Wm. Hosking, Sept. 14: We have commenced to drive west of Prosper engine-shaft at the 30; the ground is at present very hard for driving, and we expect it will continue so for some few fathoms, as it did at the level above previous to our entering the productive ground; we are, however, endeavouring to get through it as early as possible, for which purpose we have set the end to eight men. The stope in back of the 16 is working by four men, and producing paying work. At the 20 end, driving east of Quick beam engine-shaft, the lode is becoming more regular, though not yet free of the branches attending the cross-course just driven through. In extending the adit level west on this lode, at the western side of the valley, we find it to be improving in appearance as we gain depth; it is now producing some saving work, and is embedded in the most congenial and easily-wrought ground.

BEDFORD CONSOLS.—J. Mitchell, September 14: In the middle adit level cross-cut north we have intersected a small east and west branch underlying north, which is interspersed with mundic and copper ore, and fair progress is being made at this point. The ground in the cross-cut south is a little easier for driving than it has been for some time past.

BEDFORD UNITED.—J. Phillips, Sept. 13: The stopes in the 130 and 115 west are producing much as last reported. We are driving by the side of the lode in the 103 east and west. We have commenced a new stope at the eastern end of the north part of the lode, where the lode is 4½ ft. wide, and worth 4½ tons of ore per fm. The stope in this level is producing 3 tons of ore per fm. No alteration in the 58 east. We continue to drive by the side of the north lode in the 75 east and west and 62 east.

BEDOL-AUR.—Sept. 13: The ground in Crofts' shaft has altered in character since last week; it is now composed of loose limestone. I think in 3 yards more sinking we shall be in firm rock; we have sunk 4 feet during the past week. The Brynia lode is being driven north by six men; it is large, about 5 ft. wide, composed of spar, limestone, dift stones, and lead ore, yielding 25 cwts. per fathom. We have about 5 tons of lead now broken at surface and underground.

BOSCAWEN.—R. Giles, Sept. 9: The lode in the 30, driving east from Hallenbeagle, is worth about 4*l.* per fm., with a promising appearance. The ground in the cross-cut, south of Parry's shaft, is a little more disordered, with veins of spar, and occasional small strings of jack, which indicates that the lode is not far off. The water has risen about 5 in. per day during the past week, now 3 fms. below the 30.

BOTELET.—J. Trevillion: In the 36 south we have cut through the lode, where it is 4 ft. wide, consisting of quartz, capel, and good stones of lead; so far as seen it is a very promising lode; in this level north the lode is much of the same character as last reported on. I expect in about 2 fms. to reach the junction, where we may expect a change for the better. In the 26 north the lode is 5 ft. wide, producing stones of lead; in this level south the winze is down 2 fms., and the lode continues large and of a very kindly appearance; it will yield 3 cwts. of lead ore per fm.

BOTTLE HILL.—J. Eddy, Sept. 13: The lode in the stopes in the back of the 24 fm. level still holds its size—from 9 ft. to 10 ft. wide—and producing saving work for tin, and occasionally good stones of copper ore, but not sufficient of the latter to value. We find the ground in this level harder than we have it in the levels above. The lode in the stopes in the 12 and adit levels is without alteration. I am sorry to say the weather has caused a great falling off in our water for stamping and drawing.

BRYNFORD HALL.—Thomas Pierce, Sept. 7: The vein at the bottom of Simmons's shaft is looking better; we have now in it a rib of very nice ore, about 4 in. wide by 1 ft. long; the ground is very hard, still worth 9*l.* 5*s.* per yard. I had purposed to commence to drive out from the shaft 10 yards above the present bottom, but it would not be prudent to leave the rib which we have just discovered without making a trial upon it. The shaft is 110 yards deep from the surface, and about 29 yards below the deepest piece of the old works, so we have a very good stope of new ground below all the old workings in this part of the mine, with a good prospect of finding strong ore. At Grainger's, in the 86 yard level, south-west from shaft, on Ward's vein, the forebreast is very hard. At Page's vein we are now getting very nice ore in the roof, and with good prospects. On Acr-fer vein we have had the level (the 77 yard) very hard all this month, and poor for ore. Yesterday we had an alteration for the better. The vein is opening a little, and much more likely to produce ore.

BRYN GWIOG.—F. Evans, Sept. 13: There is no change in the engine-shaft sinking under the 102, or in driving the 102 fm. level east since last report. The four pitches in the 90 east produce their usual quantity of lead ore, and on an average will yield 1½ ton per fathom. The 75 east is without change. The sump sinking below the 75 west, and reported to be going down in whole ground, will yield 1½ ton per fathom, and promises to produce a good deal of lead ore. Brook's pitch in the back of the 66 is much improved, at present worth 2½ tons per fathom. We shall sell to-morrow 40 tons of lead ore. All other parts of the mine are as usual, and everything is proceeding with the usual regularity and dispatch.

BRYNTAIL.—J. Roach, Sept. 14: The stope in back of the 30, west of engine-shaft, has not improved since my last advice, but I am every day expecting a better lode, inasmuch as we have a good lode of ore in bottom of the 20. The stope in back of the 30, east of shaft, is just as last reported.

CAPE CORNWALL.—R. P. Goldworthy, Sept. 13: Saturday last was our pay and setting, which went off well. We set the following bargains:—The ground to stope in back of the 90 east by four men, at 40*s.* per fm. The lode now desued to take down and bring to shaft, in back of the 90, by two men, contract at 9*l.* The 80 to drive west by two men, at 4*l.*; the lode is composed of spar, mundic, and jasper. The ground to stope in back of the 80 east by four men, at 30*s.* per fm. The 70 end to drive west by four men, at 50*s.* per fm. The 55 west to clear by four men.

CARADON AND PHŒNIX.—W. Richards, Sept. 13: During the past month the lobby has been extended 16 fms., and we expect to communicate to the bottom of the wheel-pit to-morrow, when the excavating of the wheel-pit can be more expeditiously carried on, and we will not lose any time in getting the same finished. In the past month the cross-cut south, in the 30 fm. level, has been driven through favourable elvan and kilias ground 5 fms., and I am glad to inform you that we have intersected and driven into the No. 2 lode 2½ ft., but it is not yet cut through; its appearance and character, so far, is of a greatly improved nature compared to the level above; but it is by driving east, under the winze in the 20, where we anticipate a further improvement. So far as cut into, it contains quartz, flookan, fluor-spar, peach, a good deal of mundic, good stones of yellow copper ore, and a little black oxide of copper. Water issues very strongly from the extreme point, which augurs well for the other part of the lode; it is a fine-looking lode for the depth.

CARADON CONSOLS.—Wm. Rich, Sept. 12: We have not yet driven through the elvan in the cross-cut south; the ground, however, is very favourable, and good progress is being made.

CARDIGAN CONSOLS.—H. Boundy, Sept. 10: Esgairfraith: The sinking from surface has just reached the lode, which has a strong, healthy appearance, with a slight mixture of copper ore. It is let to four men and two boys, at 7*l.* per fm. The rise in back of the adit to meet the shaft is up 3 fms.; the lode, for the length of the rise, which is about 2 fms., will yield from 2 to 2¼ tons of copper ore per fm.; let to four men, at 5*l.* per fm. The lode in the adit driving east is very wide, and the part which is being carried in the drivage contains a little copper, but as there is a large portion standing on both sides, we cannot state its value till proved by cross-cutting, which will be done as soon as convenient; let to four men, at 4*l.* per fm. The lode in the 20, east of Copper shaft, is very wide, spotted with copper, and presenting a very promising appearance; let to four men, at 10*l.* per fm. In the Boundy adit west the lode is letting out a little more water than usual, and showing spots of copper ore, and we are daily expecting an improvement in the level; set to four men, at 5*l.* 10*s.* per fm. The mine throughout is in perfect working order. We shall sample 20 tons of copper ore on Monday next.

CARNGLAZE UNITED.—T. Hosking, Sept. 11: The ground driven last month is 5 fms. 3 ft., and the men have taken to drive the end at 70*s.* per fm. We have got about 7 fms. more to drive to the junction. There is no particular change in the lode in the end east during the past week. It is being pushed with all speed.

CENTRAL MINERA.—T. Hughes, Sept. 14: Victoria Engine-shaft: The cross-cut driving south at the 60 yard level is without alteration; the ground consists of limestone of a congenial character, slightly impregnated with lead; I am daily looking for an improvement in this end. The lode in the 40 yard level, west from the winze, yields a little ore, and very promising.—Edgworth's Shaft: The pitch in back of the 50 yard level continues worth 10 cwts. of lead per fm.

CLIJAH AND WENTWORTH.—R. Pryor, W. Pryor, C. Glasson, Sept. 14: The 20 and 30 fm. levels, on Whitford's lode, are looking more promising than for some time past, and judging from present indications we think a still further improvement may be shortly expected. The lode in the 80, east of cross-cut, on Buckel's or Uny lode, is improving as it is getting out of the influence of the cross-course, which is now 4 ft. wide, and letting out a quantity of water. We shall sell on Thursday next 290 tons of tinstuff, which we estimate will realise from 375*l.* to 400*l.*, and we hope to go on to improve.

CLOWANCE WOOD.—E. Chegwin, Sept. 12: In the 20 cross-cut, driving north of engine-shaft, the ground is hard and spare; set to drive by eight men, at 12*l.* per fm.; driven in the past month 3 fms. 0 ft. 2 in.

CROWAN AND WENDRON.—R. Reynolds, Sept. 13: Having completed the pitwork, we are now making the necessary arrangements in the 48 to sink the engine-shaft. The lode is large and kindly, and I hope ere long to be able to report something good from this point.

CROWAN CONSOLS.—J. Vivian, William Thomas, Samuel Simons: The 42 cross-cut set to drive south of engine-shaft, towards the Dumpling lode, by six men and two labourers, at 6*l.* per fm. We have already driven 2 fms., and expect to intersect the lode within a fortnight. The 20 to drive east and west of cross-cut, on Curtis's lode, by four men, at 2*l.* 10*s.* per fm. east, and 2*l.* 2*s.* per fm. west; the lode in each end produces saving work for copper ore. These levels can be opened at a speedy rate, with good chances of success. We have driven the 30, east of engine-shaft, 30 fms. on Dumpling lode, generally maintaining a size of about 3 to 4 ft., composed invariably of white spar, occasionally producing a little copper ore and blende. We would advise the suspension of this end for the present, and, seeing the engine-shaft is sunk to the 42, start a cross-cut north in that level, and push it to the intersection of Curtis's lode, which would be reached in about 25 fms.; at present it can be driven at 4*l.* 10*s.* per fathom. This could be done without any increase of cost.

DEVON AND CORNWALL UNITED.—T. Neill, Sept. 12: The lode in the winze in bottom of the 12 is not quite so good. The stope in the back of this level is worth 4 tons of ore per fm. The stope in bottom of the deep adit level is worth 7 tons per fm.—William and Mary: The lode in the 34, east of winze, is looking very promising. The lode in the 22, west of engine-shaft, has improved, worth 2 tons of ore per fathom. The stope in bottom of the 22 east is worth 10 tons per fm. The lode in the winze in the stope in bottom of this level is worth 8 tons. We have two stopes in the back of this level, each worth 8 tons per fm.

EAST CARADON.—J. Seccombe, Sept. 13: Caunter Lode: The 70 east is worth 5*l.* per fathom; the 80 east is poor; the 80 west, 12*l.*; the 90 east, 10*l.*; and the 90 west, 5*l.* per fathom.—New Lode: The 70 east is worth 6*l.*; and the 60 east, 8*l.* per fm.

EAST CARN BREA.—T. Glanville, J. Scholar, Sept. 13: No. 3 lode, in the 60 fm. level west, is producing 1 ton of ore per fathom. In the 50 fm. level east the lode is producing 4 tons of ore per fathom. In the rise above the 50 the lode is producing 4 tons of ore per fathom. No. 6 lode, in the 40, east of Buckley's, is producing 3 tons of ore per fathom, and the 40 west 2 tons of ore per fathom. In the rise above the 40 the lode is producing 4 tons of ore per fathom. Nothing new to report on in other parts of the mine.

— T. Glanville, J. Scholar, Sept. 9: Tutwork Setting: Thomas's shaft to sink below the 60 fm. level, by twelve men, at 20*l.* per fathom. The 70 fm. level to drive east on No. 3 lode, by six men, at 3*l.* 10*s.* per fathom. The 70 fm. level to drive west on No. 3 lode, by four men, at 4*l.* 10*s.* per fathom. The 60 fm. level to drive east on No. 3 lode, by six men, at 5*l.* per fathom. The winze to sink below the 60 fm. level, by four men, at 4*l.* per fathom. The 60 fm. level to drive west on No. 3 lode, by four men, at 4*l.* per fathom. The 50 fm. level to drive east on No. 3 lode, by four men, at 5*l.* per fathom. The 40 fm. level to drive east on No. 3 lode, by four men, at 4*l.* 10*s.* per fm.

The 70 fm. level to drive east on No. 2 lode, by two men, at 3*l.* 10s. per fathom. The 50 fm. level to drive east on No. 4 lode, by four men, at 4*l.* per fathom. The 40 fm. level to drive east of Buckley's shaft on No. 6 lode, by four men at 4*l.* per fathom. The 40 fm. level to drive west of Buckley's shaft on No. 6 lode, by four men, at 3*l.* per fm. fathom. The rise in the back of the 40 fm. level, by four men, at 3*l.* per fathom. The 50 cross-cut to drive south, by four men, at 6*l.* per fathom. The 26 fm. level to drive west on the new lode, by four men, at 7*l.* per fathom. The 30 fm. level to drive east on the new lode, by four men, at 5*l.* per fathom. The stopes in the back of the 50 fm. level, at 1*l.* 10s. per fathom. The rise in the back of the 50 fm. level, by four men, at 8*l.* per fathom. The rise in the back of the 60, by two men, at 4*l.* 10s. per fathom.

EAST DARREN.—Sept. 12: Taylor's Shaft: In the 116 east the lode is ⅓ yard wide, composed of clay-slate, grit, and lead ore, but not looking so well as when last reported, being disordered by a cross-joint, now yielding from 8 to 10 cwts. of ore per fm. In the 104 east the lode is from 3 to 4 ft. wide, producing 1¾ ton of lead ore per fm. In the winze sinking below this level the lode is large, and unproductive for ore at present, being disordered by soft ground. In the winze sinking below the 92, east of Taylor's shaft, the lode is from 3 to 4 ft. wide, a little improved for ore since last reported, and now producing about 2 tons of lead ore per fathom. In the same level, driving east on the south branch, the lode is from 5 to 6 ft. wide, producing 1¾ ton of lead ore per fm. In the same level, west of boundary winze, the lode is 6 ft. wide, yielding stones of ore at times, but not to value. In the 80 east the lode is from 4 to 5 feet wide, a little improved for lead ore since last reported, now producing 1¼ ton per fm., and looks promising for further improvement. In the 68 east the lode is 3 feet wide, producing full 1¼ ton of lead ore per fm. Stopes and pitches without any change We hope to sample 80 tons if possible.

EAST GUNNIS LAKE AND SOUTH BEDFORD CONSOLS.—J. Phillips, Sept. 14: The 36 fm. level end is much the same in character as reported last week. In the deep adit there has been no change requiring notice. In the rise in the back of the deep adit the lode will produce 1⅛ ton of good ore per fathom, and is promising improvement. The lode in the shallow adit presents the same favourable features mentioned in our last.

EAST JANE.—James Seccombe, Thomas Hodge, Sept. 9: Setting Report: The 48 cross-cut to drive west by six men, at 4*l.* 10s. per fathom; the ground is a little harder, and the cross-course not quite so wide as it has been, but more water is issuing from the end. If the lode has not changed its underlay below the 36 we shall reach it in about 3 fms. further driving. The 36 to drive south, on the eastern branch, by two men, at 32s. 6d. per fathom; this branch is about 1 ft. wide, showing spots of lead. To drive the 36 north, on western part, by two men, at 30s. per fathom. This is improving, and now producing good stones of lead. To rise in back of the 36 south by two men, at 2*l.* per fathom; this rise is intended to prove the lode under a point where it was productive in the 26. The 26 cross-cut to drive west by two men, at 27s. 6d. per fathom; ground favourable and congenial for mineral. The deep adit to drive north by two men, at 2*l.* 7s. 6d.; lode at present small and poor. The shaftmen are employed in making the requisite preparations for fixing the standing-lift in the bottom.

EAST ROSEWARNE.—J. James, Sept. 14: In Hallett's shaft the lode is 10⅝in. wide, producing good stones of ore. In the 85 east the lode is small, producing stones of ore. In the 85 west the lode is 15 in. wide towards the back of the lode, and producing good stones of ore, but is small at the bottom. I think this will improve shortly. In the 75 winze the lode is 15 in. wide, grey throughout, but not rich. I have suspended this winze, and put the men to rise against it in the back of the 85. We have about 3 fms. to hole; when this is done we shall stope the ground at a good profit. In King's shaft, sinking below the 75, the lode is small and poor. In the 75, west of King's, the lode is 10 in. wide, worth 12*l.* per fm. The stope in the back of the 75, east of King's, is worth 8*l.* per fm.; the stope in back of the 75, west of King's, is worth 10*l.* per fm.; the stope in back of the 65, east of King's, is worth 6*l.* per fm.; the two stopes in the back of the 65, west of King's, are worth 7*l.* per fm. and 12*l.* per fm. respectively. The tribute department is without change to notice.

EAST ST. JUST UNITED.—J. Carthew, P. Casley, Sept. 12: We are sinking the Cranjack shaft below the 10, on a large kindly lode—2 ft. wide. Driving the 10, west of this shaft, on a lode 2¼ ft. wide, and sinking a winze below the adit level worth 60s.; sinking for 47s. 6d. Sinking Ageworth's shaft below the adit level for 11*l.* per fm. We have dropped the lift below the adit level at Phillips's engine-shaft, and our sumpmen are cutting down the shaft for skip-road. The North Bosarne shaft is cut down to the deep adit, and our men are fixing timber for skip-road. All is going on well.

EAST WHEAL FLORENCE.—J. Goldsworthy, Sept. 8: Verran's engine-shaft is sunk 9 fms. 2 ft. below the adit level. To the north of Knowling's lode the branches intersected contain yellow copper ore, which bids well for a productive lode when the 15 is reached; the ground for sinking is favourable, and highly mineralised. The lode in the deep adit, driving east in the western part of the sett, is 4 ft. wide, composed of capel of the finest description, quartz, prian, mundic, and carrying a leader of copper and mundic from 15 to 18 in. wide; this lode bids well to become a rich and productive one as the end is extended east near the lead lode. A shaft has been communicated with the adit, which gives good ventilation. I am pleased to inform you the prospects are exceedingly good.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 13: We have no change in any of the underground operations of this mine, more than the lode in the 85 is showing a very promising appearance indeed, having sugary spar and a flookan, which was precisely the same in the 65, just preceding the ore, and which is only 11 fms. from shaft. The 75 cross-cut is being driven through a very good channel of ground, and we hope to cut the lode in about 6 or 8 ft. driving.

EAST WHEAL LOVELL.—R. Quenirall, Sept. 13: Turnpike Lode: The lode east and west is producing stamping work, and of a very promising character.—Middle Lode: This lode is just the same as for some time past—large, with a little tin.—North Lode: We have set the shaft to sink at 11*l.* per fm., below the 45, on a rich lode, worth for length of shaft (12 ft.) 100*l.* per fm.—South Lode: We have not taken down the lode, west since last report, as we have been driving by its side. The stopes in the back east continue to open out rich, and are worth at least 60*l.* per fm. We have removed the pitwork from the south shaft, above the 40, and have commenced stoping on the first bunch of tin which was discovered on this lode, and which is about 7 fms. above the before-mentioned stope. The lode is very good, and worth from 30*l.* to 40*l.* per fm.

EAST WHEAL RUSSELL.—J. Goldsworthy, Sept. 13: Homersham's shaft is in regular course of sinking below the 140 fm. level. The lode in the 140 fm. level, east of Homersham's shaft, is 2 ft. wide, producing good stones of yellow copper ore, and looks promising. In Courter's winze, sinking below the 130 fm. level, the ground is favourable; we hope to effect a communication with the 140 fm. level next week. The north lode, west of Soper's cross-cut, in the 130 fm. level, has been cut into about 2½ feet; the last foot is producing some rich oxide, and exceedingly promising. The north lode, east of Soper's cross-cut, in the 130 fm. level, has been cut into 3 feet, composed of capel, quartz, prian, peach, mundic, and a little copper ore—a promising lode. In the 130 fm. level, east of Soper's cross-cut, on the main part of the lode, the lode is worth 10*l.* per fathom. The stope in the back is worth 25*l.* per fathom. In the 77 fm. level, west of Northey's cross-cut, the lode is 4 ft. wide, producing stones of copper ore. The lode in the winze sinking below the 77 fm. level is large, and worth 6*l.* per fathom; this winze we hope to communicate with the rise in the back of the 88 fm. level this week. The winze sinking below the 66 fm. level, west of Collings's cross-cut, is communicated with the 77 fm. level. The lode in the 45 fm. level east is large, 5 ft. wide, composed of capel, quartz, prian, mundic, and black oxide of copper ore—a promising lode. The ground in Williams's cross-cut, driving north in the 88 fm. level, west of Hitchins's engine-shaft, is improved and highly mineralised.

— J. Richards, Sept. 15: Homersham's shaft is in regular course of sinking below the 140 fm. level, to the south of the lode, in favourable ground for progress.—Homersham's Shaft: In the 140 fm. level east, the lode is 2 ft. wide, and being composed of mundic, quartz, prian, and good stones of ore, is promising. The sinking of Curtis's winze below the 130 fm. level, on the south part of the lode, progresses favourably, and we hope to effect a communication with the 140 fm. level below in the course of another week. In the 130 fm. level east, west of Soper's cross-cut, the north lode is being cut into, and so far as seen nearly 3 ft. wide, it is composed of capel, mundic, prian, and red oxide of copper, and is looking very healthy. The north lode has also been cut into 3 ft. to the east of Soper's cross-cut, and is also promising, being composed of quartz, capel, peach, prian, mundic, and some copper ore. In the 130 fm. level east, on the main part of the lode, the lode is 3 ft. wide, and 10*l.* per fm. In the stope in the back of the 130 fm. level, east of Soper's cross-cut, on the main part of the lode, the lode is worth 25*l.* per fathom. In the 77 fm. level east, west of Northey's cross-cut, on the north part of the lode, the lode is large, 4 ft. wide, and yields good stones of ore. In the winze sinking below the 77 fm. level east, west of Northey's cross-cut, the lode is worth 6*l.* per fathom. This winze will in the course of a few days be communicated with a rise put up in the back of the 88 below. Tree's winze below the 66 fm. level, west of Collins's cross-cut, is communicated with the 77 fm. level below. In the 45 fm. level east the lode is large, 5 ft. wide, composed of capel, mundic, prian, quartz, and a little black oxide of copper. In Williams's cross-cut north, in the 88 fm. level, west of Hitchins's engine-shaft, the ground is become easier, and good progress is being made.

EAST WHEAL TOLGUS.—Sept. 13: Redruth Consols Lode: The lode in the 24, east of John's shaft, is 18 in. wide, composed of spa., mundic, and killas, with small veins of copper ore in the lode, but not to value. The ground in the 34 cross-cut is a shade easier.—Little's Lode: In the adit level, west of the cross-cut, the lode is 14 in. wide, consisting of gossan, spar, and mundic.—Hocking's Lode: In the adit level, east of the cross-cut, the lode is 8 in. wide, chiefly gossan. The lode in the adit level, west of the cross-cut, is 10 in. wide, consisting of spar, gossan, and spots of black copper ore. The ground in the adit level cross-cut, driving south, is moderately easy.

EAST WHEAL VOR.—J. Pollard, Sept. 13: At the engine shaft, sinking below the 90, we have a floor of spar, but it is a little better for progress than the ground we have had upon it, and I think by the appearance of it the worst of it is over. No change worthy of notice in the 70 west since last reported.

FRANK MILLS.—J. P. Nicholls, John Cornish, R. Andrew, Sept. 12: The ground at the engine-shaft, sinking below the 115, continues much the same going down. In the 115 north the part of the west lode being carried has improved within the last two days, and it is now yielding from 3 to 4 cwts. of rich lead ore per fathom, and looking very kindly for still greater improvement. We have recently resumed driving the 100 north, on the west lode, which is looking highly promising, and at present yielding from 2 to 3 cwts. of good quality lead ore per fathom. The lode in the winze sinking in bottom of this level is yielding ⅓ ton of lead ore per fathom, and the ground improving. The stopes in back of this level are yielding ½ ton, 8 cwts., and 12 cwts. of lead ore per fm. respectively. The rise gone up from this stopes is communicated with the 84, which we shall resume to drive north in a few days. The wide stopes in the back of the 45 north are yielding fully as much ore as stated in last report—the north one 1½ ton, and the south one 2 tons per fm. Our tribute pitches are yielding fair quantities of lead ore at the various tributes. We are making good progress with our dressing.

FURSDON.—J. Collins, Sept. 13: On Monday last we set the engine-shaft to sink below the 21, by six men, at 17*l.* per fm. A cross-cut to drive south at the 21 east, to two men, at 3*l.* 10s. per fm. A pitch in back of the 21, to four men, at 12s. in 1*l.* A pitch in back of the 11, to two men, at 13s. 4d. in 1*l.* A pitch in back of the adit level, to two men, at 12s. in 1*l.* No change in the value of the lodes since my last.

FURZE HILL WOOD.—W. Doidge, Sept. 13: We have intersected the main lode in the 54 fm. level cross-cut, it is 3 ft. wide, composed of capel, mundic, spar, and tin, a promising lode, and no doubt as the levels are extended on its course we shall lay open some profitable ground. The cross-cut is being continued north towards No. 1 north lode; it is favourable ground for driving, and very congenial for the production of tin.—No. 1 North Lode: The lode in the stopes in back of the 40, east of cross-cut, is from 3 to 4 ft. wide, composed of capel, mundic, peach, and spar, and worth full 12*l.* per fm. for tin. We have commenced calcining, and hope to have 6 tons of tin ready for market in the course of a week or ten days. Our engine and stamps are working well, and water easy.

GAWTON.—G. Rowe, Sept. 9: The leader part of the lode driving east of cross-cut at the 50 is 4 ft. wide, yielding from 4 to 5 tons of ore per fm. The ground in the winze sinking below the 36 is without change, being principally composed of spar, mixed with killas; the lode is standing to the south. We are busily engaged in dressing the ore from the new discovery (new shaft), which is turning out well.

GODOLPHIN HILL.—Jos. Vivian and Son, Sept. 14: The caunter lode in the deep adit, south-east of Parson's shaft, is 2 ft. wide, very kindly, and producing saving work for tin. In the shallow adit, north-west of Derry shaft; the lode is about 1 ft. wide, producing saving work for tin. In the same level, south-east of Pump shaft, the lode is 1 ft. wide, opening tin ground, which will work at 10s. in 1*l.* tribute. The north lode in the shallow adit, east of new shaft, has much improved in the last few feet driven, and is now opening ground which will work at a tribute of 6s. 8d. in 1*l.* We have set the deep adit to drive south-east of Parson's shaft, at 1*l.* 17s. 6d. per fathom. The shallow adit to drive north-east of Derry shaft, at 1*l.* 2s. 6d. per fathom. The shallow adit to drive south-east of Pump shaft, at 2*l.* 15s. per fathom. The shallow adit to drive east on north lode, at 4*l.* per fathom. On tribute we have set to nine men at 10s., two men at 12s., and two men at 13s. 4d. in 1*l.* Within the month we have sold tin in the stone to the amount of 121*l.* 19s. 4d., and we calculate on making another good return previous to the meeting to be held on the 27th inst.

GOLCH HILL.—Sept. 13: The shaftmen are engaged cutting plat, fixing ladders, &c. There is a good branch of lead in the bottom, but very little in the end. We have about 3 tons of lead here and at the old works.

GREAT BRIGAN.—John Tredinnick, Sept. 13: In the end driving west of the new shaft, at the 10, the lode has formed a splice, and at present small. The lode in the winze sinking below the 10 produces a little ore. I have put two men to sink a winze in bottom of the above level further west, where the lode is worth for copper ore 5*l.* per fathom, and looks kindly to further improve. The stope in back of the said level, west of shaft, is worth for copper ore 5*l.* per fm. The stope west of No. 2 winze, in back of the 10 is worth on an average for copper ore 6*l.* per fm.

GREAT RETALLACK.—W. H. Reynolds, Sept. 14: There is no change in the adit end to report this week. The tributers have commenced to raise blende.

GREAT SOUTH CHIVERTON.—J. Nancarrow, J. George, Sept. 14: The engineers are making good progress in erecting the engine; all the heavy parts are now fixed. The boiler-house walls are nearly finished, and the carpenters will commence putting on the woodwork of the roof to-morrow. The sumpmen are busy about the pitwork. All the rods will be sent down to-day, and the plunger-lift will be finished this week.

GREAT SOUTH TOLGUS.—J. Daw, Sept. 13: Friday last was setting-day. In Lyle's shaft, sinking below the 166, the lode is 1½ ft. wide, producing 1 ton of copper ore per fm.; sinking by nine men, at 25*l.* per fm. In the 166 east the lode is 1½ ft. wide, producing good stones of ore; set to six men, at 4*l.* 10s. per fm. In the 166 west we are cutting through the tin lode; it is producing low quality work; set to two men and two boys, at 7*l.* per fm. In the 154 east the lode is small and unproductive, and is disordered by the elvans; set to four men, at 7*l.* per fm. In new shaft, sinking below the 140, the lode is 1 ft. wide, producing 1 ton of copper ore per fm.; set to four men, at 5*l.* 10s. In the 140 west, on the tin lode, the lode is 3 ft. wide, worth 10*l.* per fathom for tin; set to four men, at 3*l.* 15s. per fm. In the rise in the back of the 140, on the tin lode, the lode is 2 ft. wide, worth 9*l.* per fm.; set to four men, at 7*l.* 10s. per fm. In Noel's shaft, sinking below the 100, the lode is 1 ft. wide, producing some good copper ore; set to six men, at 5*l.* per fm.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, Sept. 9: Hill Brothers Engine-shaft: The ground in the 75 cross-cut, driving south, is a little improved, and letting out a quantity of water, being in a good-looking elvan. The ground in the 63 cross-cut south is without change to notice since last report.—Buckley's Shaft: The lode in the 25 east is about 5 ft. wide, worth 9*l.* per fm. In the stopes in the bottom of this level the lode is 4 ft. wide, worth 10*l.* per fm. In the stopes in the back the lode is 3 ft. wide, worth 8*l.* per fm. Our tribute pitches are turning out fair quantities of tin-stuff, and our stamps constantly in operation—looking satisfactory for the next sampling. Surface work, dressing, and calcining are being carried on with all speed.

GREAT WHEAL BUSY.—J. Edwards, J. Tredinnick, C. Bawden, Sept. 9: There is no change to notice in the 150, east of engine-shaft, during the past week; lode worth 8*l.* per fm. Offord's shaftmen have been engaged during the week preparing and changing the broken windbore and door-piece; lode as last reported, worth 45*l.* per fm. The lode in the 140, east from Offord's shaft, is 2 ft. wide, worth 8*l.* per fm. for copper and tin. The lode in the 130, driving east from said shaft, is 18 in. wide, producing saving work for tin. The south lode, in the 120, west from Offord's shaft, is 1 ft. wide, producing stones of copper ore; we purpose suspending this end for the present, and put the men to sink a winze below the 120, east from Offord's shaft, in order to ventilate the 130. The lode in the 110, driving east from Mathew's shaft, is improving in appearance and character; we hope to meet with the same shoot of tin here as we met with in the 100 shortly. The lode in the 100, driving east from Walker's shaft, is 6 ft. wide, worth 40*l.* per fm. Walker's shaft, sinking below the 90, is worth for length of shaft (12 ft. by 6 ft.) 50*l.* per fm. The lode in the 90, east from Walker's shaft, is worth 20*l.* per fm., with a promising appearance for improvement. No change to notice in the rise in back of the 90, against Walker's shaft, since last report; lode worth for the part carried 12*l.* per fm. The lode in Walker's shaft, sinking below the 80, is worth for the part carried 15*l.* per fm. The lode in the 70, east from Walker's shaft, is producing stamping work for tin, of a very promising appearance. No change to notice in the rise in back of the 70, against Walker's shaft, during the past week; lode producing saving work for tin. At Walker's shaft, in the 50, the men are engaged cutting ground preparatory to sinking the said shaft below the said level. At Walker's shaft, in the 40, the men are engaged cutting ground for plat preparatory to driving the said level east. Nothing new to notice in the 36 cross-cut, south from Walker's shaft. The men are busily engaged in fixing skip-road in Walker's shaft from the 36 to surface.

GRYLLS WHEAL FLORENCE.—Edward Rogers, Edmund Rogers, Sept. 12: The engine-shaft is down 6 fms. 1 ft. below the 12; the ground is more favourable for sinking, the shaft having passed through a very hard fluor of spar, but is now in good killas ground. The 12, north on the caunter, is without alteration; the lode is 18 in. wide, producing occasional stones of tin.

GWYDYR PARK CONSOLS.—W. Smyth, Sept. 11: Since the last general meeting we have driven Gwydyr middle level 4 fms. 2 ft., during which the lode has been productive, and with a kindly appearance; it is at present about 4 inches wide, of spar and lead ore, worth of the latter about 6 cwts. per fm. We have been stoping in the back of this level, but are at present rising to prove the lode going up; lode taken down today, worth about 7 cwts. of lead ore per fathom, with a kindly appearance. We have driven Gwyn Lilfon adit 3 fms. 4 ft. 10 in.; ground very hard, and the lode small and unproductive; during the last fortnight the ground seems to be wetter than previously. We also sunk the new shaft 3 fms. 3 ft. 7 in., making it 11 fms. 3 ft. from surface; the lode in the bottom is very kindly, producing good stones of lead and blende; we have been obliged to suspend this shaft for the present, as the water is too heavy for manual labour. We are now driving the deep adit to come under it, hoping it will drain off the water, and if the lode continues down the same as it is in the shaft, I have no doubt it will do so; we are driving the level as fast as possible with six men. We have from 3½ to 4 tons of lead ore broken on the mine and in course of dressing; it is all from Gwydyr stopes and middle adit.

HALLENBEAGLE.—E. Richards, R. M. Kitto, Sept. 9: Pinniger's engine-shaft, sinking below the 56 fathom level, is in a hard floor of ground; lode 1½ ft. wide. The lode in the 56 fathom level, driving west of engine-shaft, is 1 ft. wide, producing good stones of ore. In the 56 fathom level, driving east of sump-winze, the lode is 2 ft. wide, worth 12*l.* per fathom. At King's shaft, sinking below the 40 fathom level, to cut the south wall, the lode is 4½ feet wide, composed of spar, peach, mundic, and good stones of copper, with a very kindly appearance. The 40, east of King's shaft, on north lode, is communicated with the former workings; we have commenced to drive east of said shaft at this level on a part of the south lode in the past week, which end is improved, and is producing good stones of ore. The lode in the 43, driving east of Reed's shaft, on Reed's lode, is 1½ ft. wide, worth 15*l.* per fm. The 43, driving west of said shaft, on same lode, is communicated with the former workings, west of Roberts's shaft, where the ground is worked away below this level.

HARWOOD.—J. Race, Sept. 9: Scar Head: The stopes here all raising ore about as last reported.—Trough: Nothing new in the level here worth notice. I have examined the air-shaft, and I find it will not require much expense to put it in good order. I send you a sample of the ore at Scar Head, of which we will have 24 tons ready in about three weeks.

HAWKMOOR.—J. Richards, Sept. 12: The lode in the stopes in back of the 25 has improved, worth 2 tons of copper ore per fathom.—West Hawkmoor: The sinking of the ventilating shaft progresses very satisfactorily. We hope to sample a small parcel of copper ore at the next sampling.

HINGSTON DOWN CONSOLS.—T. Richards, Sept. 13: The 130, east of Bailey's engine-shaft, is somewhat disordered by the cross-course, and for the present can only be valued at 40*l.* per fm. The 130, west of Bailey's engine-shaft, is improved, worth full 75*l.* per fm. The rise in the back of the level, east of shaft, is worth 45*l.* per fm. The 120 west is improving, present value 25*l.* per fm. The winze sinking in the bottom of the 120, east of Bailey's engine-shaft, towards the rise going up from the back of the 130, is worth 40*l.* per fm. No change in any other part of the mine.

KELLY BRAY.—G. Rowe, Sept. 13: The lode in the flat-rod engine-shaft, sinking below the 30, is 18 in. wide, producing good stones of ore. The lode in the 30 east is 2 ft. wide, yielding some good saving work. The lode in the stopes in back of the 30 west is worth 15*l.* per fm. The lode in the stopes in bottom of the 30 west is worth from 15*l.* to 20*l.* per fm.

LADY BERTHA.—Capts. Harpur and Metherell, Sept. 11: The lode in the 30 east continues about 5 ft. wide, composed of mundic, peach, quartz, and ore, worth of the latter 5 tons, or 15*l.* per fm. No alteration in the appearance or value of the lode in any other part of the mine since our last report.

— F. C. Harpur, Sept. 14: No lode has been taken down in the 53, east of the new shaft, since our last report; when last cut through it was between 2 and 3 ft. wide, producing stones of ore. The lode in the stopes in bottom of the 41 west is about 2 ft. wide, composed of mundic, quartz, and ore, worth of the latter 2 tons, or 8*l.* per fathom. The ground in the cross-cut driving south to the east of the great cross-course, in the 41 east, continues very favourable indeed for exploring. In the cross-cut driving south in the 30 east the ground is a little harder than it has been. The lode in the 30, to the east of the great cross-course, is about 5 ft. wide, presenting favourable appearances, composed of mundic, quartz, and ore, now worth of the latter 6 tons, or 18*l.* per fm. The tribute department continues to yield much as usual.

LANIVET.—John Tregay, Sept. 9: At Ouiton's engine-shaft, on Vance's lode, sinking below the 12, the lode is producing good work for tin. Nothing new in any other part of the mine.

MAUDLIN.—J. Tregay, Sept. 9: Old Mine: In the 80, east of sump-shaft, the lode is composed principally of mundic, peach, and stones of copper ore. The sumpmen are making good progress in driving the cross-cut north. In the 70 east the lode is still unsettled, but it contains native and grey copper ore in the heads.—West Mine: At the 20 the branches contain spots of grey and yellow copper ore.

MERLLYN.—W. Sandoe, Sept. 13: No change of importance has taken place in this mine during the past fortnight. The stope in back of the 20 continues to produce a good mixture of lead ore, worth 6 to 8 cwts. per fm., and is rather improving. The 20, driving east, progresses favourably; I can say but little of this point for a few days, until we get through the great lode.

MERRYBENT AND MIDDLETON TYAS MINING AND SMELTING (Yorkshire).—John Cain, Sept. 11: At Merrybent Mines, in driving off the vein in the south-west level there has been a very considerable improvement, the lode now yielding 1 ton of lead ore per fathom, with every prospect of continuance. The upper drift in the same lode, in the limestone, is looking quite as favourable, and yielding about the same quantity of ore. The main cross-cut level west is driven 140 fms., and it is expected will soon intersect the vein. A new level has also just been set off on the Kirkbank royalty.

MINERA UNION.—W. T. Harris, Sept. 14: Brabner's Shaft: The pitch in bottom of the 80 yard level, north of No. 1 winze, is worth 1 ton of lead per fm. The pitch in the back of this level, south of No. 2 winze, is worth 15 cwts. of lead per fm. We have commenced to drive north on course of a branch, north of the cross-cut, at this level; the ground is very promising.—William's Shaft: The lode in the 60 yard level north is as last reported, worth 10 cwts. of lead per fm.; ground very promising.

MOLLAND.—T. Bennetts, Sept. 13: The sumpmen having completed dividing and casing the shaft to the 72, have resumed driving that level east, where I am glad to say the lode is gradually improving, producing over ⅛ ton of ore per fathom. The lode in the rise in back of the 62 east is 4 ft. wide, being poor and unproductive at present. The lode in the rise, on the south branch, in back of the 32 east, is about 5 in. wide, producing saving work, and, on the whole, looking a little better than last reported. The engine is working pretty well, and I expect it will be in full swing for drawing stuff from our bottom level on Friday next.

NEW BIRCH TOR AND VITIFER CONSOLS.—Capts. Skewis, R. Trevarthen, J. Symons, Sept. 12: The 48, on main lode, is much improved, and now worth 6*l.* per fathom. The ground in the 48 east, on the north lode, is improved for driving, and presenting a very kindly appearance for tin. The 36 east, on north lode, is producing good saving worth for tin. The winze sinking below this level is now down to within 5 feet of the back of the 48, and will be communicated with by the end of this month. The 24 is worth 8*l.* per fm. The 12 east, on north lode is yielding good stones of tin, a very kindly lode, with great prospects of further improvement. In the 12, west of Lance's, the lode is large and kindly, and worth 5*l.* per fm.

NEW CORNISH.—J. Richards, Sept. 12: South Wheal Maria: Since the report of July 14 the 82 has been extended west 2 fms., the lode averaging 1 ft. wide, composed of mundic, capel, and quartz. This driving since the water has been got out in reasonable ground is becoming easier, and fair progress is being made; it is advanced about 19 fms., and is now about under the winze sunk in bottom of the 70. In the 70 west ground is much disordered, and the lode having gone off south the drivage is turned that direction for its intersection; the ground is favourable for progress. In the bottom of this level (the 70) a second winze near the cross-cut from the shaft has been commenced, in which the lode is 3½ ft. wide, composed of capel, quartz, mundic, and worth 1½ ton per fm.—Latchley Consols—Engine-shaft: The 40 has been driven during the months of July and August 6 fms. 3 ft. 8 in., and the lode is 2½ ft. wide, composed of capel, mundic, quartz, and occasionally good stones of copper ore. The cross-course is not yet reached, but a great change in the ground indicates that the level is coming upon it. The lode in the stope in bottom of the 40 east, and east of Sleep's winze, is improved, being at present worth 4 tons of good ore per fm. About midway between the 40 and the 60 east, and east of Sleep's winze, a 50 fm. level has been commenced, where the lode looks well; it is 4 ft. wide, and worth 4 tons of ore per fm. In the stope in the back of the 40 the lode is also improved, and is worth 2 tons of ore per fm. In the driving of the 60 east is resumed, the lode in which is 3 ft. wide, composed of capel, mundic, quartz, peach, prian, and ore, saving work, and is exceedingly promising; we are looking at the rather rapid rate of the dip of the ore east in the stopes, some 11 or 12 fms. will have to be driven before reaching the productive ground; this level will be pushed on as quickly as possible. It will be observed from the above that South Maria is not yet without any improvement. Latchley Consols, however, is looking much better, and in the 60 east also we anticipate a great change for the better, and, judging by the dip of the ore in the mine, we shall, I think, have to sink to a much greater depth to reach the main run of ore ground at South Maria.

NEW CROW HILL.—W. Trelease, Sept. 12: Saturday being our setting and measuring day, the following are the particulars:—The 70 east measured 3 fms., and was set to six men, 5 fms., or the month, at 4*l.* per fm. The 55 east measured 3 fms., and was 8 in., and is re-set to three miners and three labourers, for one week, at 4*l.* 10s. per fm. The lode here at present is very large and poor, and as the end is greatly in advance of the 70, I purpose to remove these men at the end of this week for a month or two to commence a new stope in order to prove what the backs are made of at the east of the present stopes. The stopes in back of the 55 measured 12 fms. 4 in., and are set to four miners and four labourers, for the month, at 25s. per fm., with 2*l.* per ton for mundic, and 2s. per ton for mundic; the lode here has somewhat further improved, and is worth in places from 6 to 8 cwts. of ore per fm., with 2 tons of mundic. I have not measured Louisa's shaft, as I want first the men to square down the ground in order to cut the plat at the 40 and secure it, which work was let on Saturday to commence at 12*l.* I intend this week to send away sample of about 30 tons of mundic, which has 7 or 8 tons of rough we have on the mine.

NEW EAST BIRCH TOR.—W. Skewis, R. Trevarthen, J. Symons, Sept. 12: The middle level, east of Prideaux's, is still full of lode stuff; the men are making little progress in clearing the same, and the stuff now coming from this level will pay well for stamping.

NEW EAST RUSSELL.—J. Gifford, Sept. 12: The lode in the 27, east of new engine-shaft, is 5 ft. wide, of a kindly appearance, and yielding occasional stones of copper ore, but not enough to value. In Gubbin's pitch in the back of the deep adit the lode is worth 7*l.* per fm.

NEW PEMBROKE.—F. Puckey, J. Puckey, Sept. 11: In driving the 60, east of engine-shaft, on the north lode, the lode is 1½ ft. wide, composed of quartz, prian, peach, and producing some good work for tin, worth 5*l.* per fm. In the back of this level east of the cross-cut, we are putting up a rise to communicate with the winze, which is sunk 5 fms. below the 45, and is now suspended in consequence of water. The lode in the rise is 2 ft. wide, of a very kindly character, and worth for tin 7*l.* per fm.; and rising 3*l.* per fm. In the 60 cross-cut south the ground is still favourable for driving, we expect to be getting near a lode or branch as the end is letting out more water; and for driving 65s. per fm. In the 45, east of shaft, the south part of the lode is small and poor; we are driving a cross-cut north to cut the north part, and expect to meet the same by the end of the present month.

NEW ROSEWARNE.—E. George, Wm. Michell, Sept. 13: The lode in Slade's shaft is 4 ft. wide, worth 8*l.* per fathom. The lode in the 84, east of Bickford's shaft, is 2½ ft. wide; in the same level west it is 3 ft. wide, producing stones of tin and copper ore. The two stopes in the back of this level are each worth 10*l.* per fm. The stope in back of the same level, east of shaft, is worth 6*l.* per fm. The lode in the 74 cross-cut west of Bickford's shaft, is producing stones of copper ore. The stope in the back of this level is worth 10*l.* per fm. In the 67, driving west of Bickford's shaft, the lode is 1½ ft. wide, producing stones of tin. The winze sinking below this level is worth 10*l.* per fm. The stope in back of the 58 is worth 6*l.* per fm. The lode in the 46, west of Pool's shaft, is about 2 ft. wide.

NEW TRELEIGH.—S. Michell, Sept. 14: In the report of last week I mentioned the lode in the 60 end, driving west of the cross-course, being disordered by a small branch, but am glad to remark to-day that that impediment is removed, and that the lode has become well defined, and looking very much better for ore. The lode in the east of the new shaft, has improved for ore in the last few days.

NEW WHEAL MARTHA.—H. Rickard, G. Rickard, Sept. 14: The stope in back of the 30, west from winze, is not looking quite so well for copper ore, worth 12*l.* per fathom; I hope this is only temporary. The 10, towards Rickard's shaft, is without change since last week. Richard's shaft is down 9 fms. 3 ft. by the side of the 10, towards the 10; the ground is a little stiff for sinking, but congenial for copper ore. The stopes in the bottom of Trowse adit are a little disordered by a small cross-course, worth at present from 18*l.* to 20*l.* per fathom. Our tribute department, upon the whole, is not looking quite so well as it has for some time past. I hope to see an improvement shortly. All our machinery is working first rate.

NORTH BULLER.—R. Pryor, H. Harvey, Sept. 9: The 100 cross-cut, south of engine-shaft, is still in the elvan-course, and the end letting out a quantity of water. The lode in the 100, east of cross-cut, is 1 ft. wide, producing good stones of copper ore. The engine and pitwork are in good order, and working well.

NORTH CHIVERTON.—Wm. Hancock, Sept. 12: The new engine-shaft is sunk 43 fms. 2 ft. below the surface; the sumpmen have now commenced to cut plat for the above its present bottom preparatory to cross-cutting to the south lodes.—Old Shaft: We have now the old 50 plat in the east side of the shaft, and hope shortly to be down deep enough to clear it out and secure it, and get in to see the lodes at that level. The lode in the 40 east is 2 ft. wide, producing a little blende and lead, but not enough at present to put much value on. The stopes in the back of this level, east and west, are producing much the same as last reported on. The winze sinking below will produce near 4 tons of blende per fm. for its length (9 feet). In the winze sinking under the 30 east, on the north part, the lode is about 1½ ft. wide, producing 1 ton of blende per fm., and good stones of silver-lead—laying open tribute ground. No. 1 plat in back of the 30 east, improved for lead. No change in any other department.

— W. Hancock, Sept. 13: We are nearly got down to the bottom of the 50 plat at the sump-shaft, and have to-day dropped a line down 25 fathoms below, and from all appearance in a clear shaft; this is a good feature for the future in draining out the mine, and will ultimately be a great saving, as we have had a costly and troublesome affair of it to get down this depth.

NORTH DOLCOATH.—James Paull, Sept. 13: In the engine-shaft sinking below the 85 the lode, or part carrying, is 5 ft. wide, with more lode standing to the south, altogether presenting a very promising appearance. In the 85 west the lode is about 4½ ft. wide, and has produced some beautiful stones of yellow copper ore during the past week. In the 70 south the cross-course is now about 2 ft. wide, yielding occasional stones, coated with ruby silver.

NORTH DOWNS.—J. Grenfell, Sept. 12: We have intersected a small branch in the 50 cross-cut, the underlie of which agrees with that of New Brigan lode; it is as small, but is very near the cross-course; we have put the men to open on it, and shall prove to be the lode we shall be able to say more about it in the course of a week or so. We have also taken out the dam in the 10 cross-cut referred to last week, and have put two men to open on one of two lodes which are intersected in the cross-cut; the one we have commenced working on is about the same distance from the main lode as a branch just met with in the 50 cross-cut; it is 1 ft. wide, very regular, and produces stones of ore. The rise in back of the 50, on the south lode, west of pitch, is looking better. There is a branch of ore coming in in the end of it next to the pitch, producing 1 ton per fm. No change to notice in any other part of the mine.

NORTH LEVANT.—J. Bennetts, J. Thomas, Sept. 13: We have set Law's engine-shaft to sink to the 115 for the sum of 100*l.*; the lode at present is worth 10*l.* per fm. The 100 west is driving at 18s. per fathom; lode worth 1*l.* 10s. per fathom. The 88 west is driving at 2*l.* 5s. per fathom; lode worth 2*l.* 10s. per fathom. The 88 east is driving at 2*l.* 5s. per fathom; lode still in a disordered state. The 85 east, on West Game lode, is driving at 4*l.* 10s. per fathom; lode worth 3*l.* 10s. per fm. The winze in bottom of the 70, west of Wheal Game shaft, is sinking at 9*l.* 9s. per fathom; lode worth 8*l.* per fathom. The winze in bottom of the 70, east of Wheal Game shaft, is sinking at 5*l.* per fathom, is worth 5*l.* per fathom. We have 14 pitches working on tribute, varying from 2s. 6d. to 10s. in 1*l.*

NORTH MINERA.—Sept. 13: We have got through the shale in the eastern drift, and are now on a hard black stone, spotted with mundic and blende. The level driving east from back of the rise in the 25 is rather harder, and, if anything, is looking better; it will produce fully 2 tons

the south part of the main lode in the 20 end, west of Mayne's cross-cut, which is 5 ft. wide, but worth nothing to value. We are going to drive north to see the north part of it in the same level. Also extend Mayne's cross-cut north, to see the north part of the tin lode, which is very likely to prove the main part of it. We have holed the 30 end east to Gorman's rise and stope above the back of the 42, on the tin lode, where we shall have a good piece of tin ground soon laid open. We have sent samples of 9 tons of tin to the different smelters, which will be sold and sent to the purchasers the early part of next week. We shall also sample as much copper ore as we possibly can on Sept. 26.

OKEL TOR.—W. B. Collom, W. Metherell, Sept. 13: In the 50 cross-cut south there are still capels, with mundic in the end, which, owing to the quantity of water, is most troublesome, and spare for driving through. The stopes in the back of the 40 are not yielding quite so much ore as they have been. In the other parts of the mine there are no alterations to notice since last week's report.

OLD GUNNISLAKE.—W. G. Gard, James Phillips: Parker's shaft is being sunk by the side of the lode, in favourable ground; we have now two or three branches falling into the lode from the north. We have not yet reached the caunter lode; the ground has become rather troublesome, owing to the water from the end causing the ground (which is soft, decomposed granite) to swell and require timber. We are glad to inform you that Michael's shaft is now clear of stuff to the bottom, and we are making preparations to drop the lifts, in order to drain the mine with as little delay as possible.

PEDN-AN-DREA UNITED.—Wm. Tregay, J. Thomas, Sept. 9: Sump: The 130 east end is worth 9l. per fm. The 130 west end is worth 6l. per fm. In the 130 north cross-cut a small branch has been intersected—unproductive. The 120 east, on Skimmer's lode, is worth 10l. per fm. The 120 west winze is worth 30l. per fm. The 100 east end, on Skimmer's lode, is worth 10l. per fm. The 90 west rise is worth 4l. per fathom.—Cobbler's: The 110 east end is worth 8l. per fm.; the 110 west end, 4l.; the 100 west, unproductive; the 90 east, 3l.; the 68 east winze, 12l.; the 90 east rise, 8l.; and the 68 west winze, 4l. per fm. The bottom of the new shaft has not yet reached the lode, but will come down upon it in about 2 fms. more sinking; the lode where seen in the old men's workings is worth about 10l. per fm.

PENHALLS.—Wm. Higgins, J. Nance, Sept. 9: We have not met with any change in the 60 cross-cut, south of engine-shaft, to notice. In the 60, driving west of north cross-cut, the lode has a little improved, now 2 ft. wide, worth 13l. per fathom; and in this level, driving east, 20 fm. wide, worth 11l. per fm. In the 50, driving west, south of shaft, on flat and Cowling's lodes, they are still 6 ft. wide, worth 6l. per fm.; and in dito, driving east, 4 ft. wide, worth 7l. per fm. In the 50, driving west, north of shaft, the fat lode is 2 ft. wide, and worth 4l. per fathom. In the winze sinking below this level the lode has decreased in size and value, being disordered by a gossan, now 2 feet wide, worth 20l. per fm. The Pink lode in the 40, driving west of south cross-cut, is 3 ft. wide, worth 18l. per fathom, with a kindly appearance. The north lode in the 20, driving east of the flat-rod shaft, north of heave, is 20 inches wide, producing low price stamping work.

PRINCE OF WALES.—W. Gifford, Sept. 12: We are pushing on the 45 cross-cut south of Watson's shaft, with all possible speed; every effort is being made to cut the lode at this level without delay. The tribute department is without alteration.

PROSPER UNITED.—J. Nicholls, W. H. Martin, W. Millett, Sept. 13: The lode in 40 west is small and poor. The 50 west is without change. The rise in the back of this level will yield 1 ton of ore per fathom. The lode in the 60 is 18 in. wide, producing a little saving work for tin occasionally. The lode in the 70 west is worth 10l. per fathom for tin and copper, and it has a very kindly appearance. No. 1 winze, in the bottom of this level, is not so good, now worth 3 tons per fathom. The cross-cut south from the 80 has passed through a branch containing saving work for tin. No change in Hand's nor Hill's shaft since last report. The pitches are producing about the usual quantity of copper and tin.

REDMOOR.—T. Taylor, Sept. 13: The ground is a deal softer in the western end, and we are obliged to use timber; the lode is about 2 ft. wide, being composed of mundic, peach, and prian, mixed with black copper ore. We are driving the eastern end on the lode. No north or south wall. This driving is yielding some good saving work—a more promising lode I never saw.

ROSEWALL HILL AND RANSOM UNITED.—Edward Thomas, R. F. Treweeke, Sept. 13: At the Ransom engine-shaft we have nearly made the required preparation for cross-cutting to the lode at the 140. The lode in the 130, west of the cross-course, is worth 7l. per fm. The lode in the 110 east is 9 in. wide, yielding a little tin, but not to value. The lode in the 100 east is worth 6l. per fm., and looking very promising. The lode in the 90 east is diminished in size, now 18 in. wide, and worth 18l. per fm. The lode in the various stopes in back and bottom of this level is without change since last reported on. The lode in the 85 east is worth from 25l. to 30l. per fm. The discovery made at the 60, east of Ransom, still improves, worth 25l. per fm.; ground a little easier for progress, and more congenial for mineral. At the engine-shaft we have eased and divided the shaft from the 160 to the 170, and shall be in a position to sink under the 170 at the next setting. At the old sump-shaft we have forked the water a little below the 70, cleared the said level, which we found in a very dilapidated state, and the end very hard and poor. Having dropped the shaft, we find there are some fathoms of stuff in the bottom, and there being no place to deposit it we have suspended operations (at least for the present), and purpose driving the 100 with all speed.

ROSEWARNE CONSOLS.—John Nancarrow, Sept. 11: At our survey on Saturday the following work was set:—The 90 to drive east of Ellen's by eight men, at 2l. 10s. per fm.; lode 1 ft. wide, composed of iron and spar. The 80 to drive east of Ellen's by four men, at 2l. 10s. per fm.; lode small. The 70 to drive east of Ellen's by four men, at 3l. per fm.; end improved, by a branch or part of the lode coming in from the south, both parts worth 6l. per fathom. The back of the 70 fathom level east to stope by four men, at 2l. 7s. 6d.; the lode is worth 12l. per fathom. The 20 fathom level, east of Ellen's, set to drive by three men and three boys, at 6l. per fm.; the end is poor, but there appears to be a fair prospect of ore being met with. The 70 to drive west of sump by four men, at 3l. per fm.; lode small. The 80 to drive west of sump by two men, at 1l. 15s. per fm.; lode improved in the upper part of the end, containing ore, and present a very promising appearance. There are eight pitches set in the 60 and above to 17 men, at tributes varying from 8s. to 13s. 4d. in 1l. Taken as a whole, the mine looks better than it did a month ago.

ROYALTON.—T. Parkyn, Sept. 13: The engine-house is up, and the stack completed. We shall get the roof on this week, and the engineers are coming on Monday next, after which the engine will soon be erected. We are sinking the engine-shaft with six men, and they are making excellent progress. All other work is being carried on with vigour, so that the moment the engine is set to work we shall commence stamping and dressing tin. The results then, I know, will tell far better than I can say on paper.

SILVER VEIN.—E. Burn, Sept. 13: In the 50 cross-cut west the ground continues favorable for driving. In the enlarging of the north engine-shaft fair progress is being made; the shaft is complete as high up as the bottom of the 20. The branch of ore referred to in last report has continued 4 fms. in height in the north end of the shaft. We have put two men to drive off north about 5 fms. below the 20, to prove if the ore continues. The engine-house is covered in, and spring beams, &c., fixed. The engineers are now engaged getting in the bob.

SITHNEY WHEAL METAL.—T. Julian, S. Harris, Sept. 14: The engine-shaft is sunk 7 fathoms below the 145; at this point we have intersected a branch underlying south, and will form a junction with the lode at about the next level; we think this a good indication, as nothing of the kind has been seen in the upper levels. In the 145, driving east, we have a lode 3 ft. wide, well defined, with a little tin, but not of much value; in the same level, driving west, the lode is 1 ft. wide—poor. The 95 cross-cut south is progressing favourable. In the eastern shaft, sinking below the 15, to intersect the south part of the lode, the ground looks congenial for mineral.

SORTRIDGE CONSOLS.—J. Richards, Sept. 14: In the 50, east of Mayne cross-cut, on No. 5 south lode, the lode is 18 in. wide, and consists of gossan, quartz, and mundic. In the 60, east of Mayne's cross-cut, on No. 2 south lode, the lode is 2 ft. wide, composed of quartz, mundic, capel, and a little ore. In the 20, east of the eastern shaft, and east of White's rise, on the north part of the main lode, the lode is 3 ft. wide, and worth ¼ ton of ore per fm. In the 10, west of White's rise, the lode is 2½ ft. wide, composed chiefly of gossan, containing a little ore.

SOUTH CARADON WHEAL HOOPER.—W. C. Cock, Sept. 14: We have completed the cutting of the plat in the 54 at the flat-rod shaft, and are progressing with the cutting down of the said shaft as fast as the nature of the work will admit.

SOUTH CRENVER.—E. Chegwin, Sept. 12: In the adit end, driving east of cross-cut, on the north lode, the lode is 9 in. wide, with spar, mundic, and jack.

SOUTH DARREN.—J. Boundy, Sept. 11: There is no particular change worth notice in either of the bargains since last report, except in the 40 fm. level end west; the lode at this point has very much improved, and is worth for lead and copper 15l. per fathom, and promising further improvement. All the machinery is in good working order. We are progressing satisfactorily with the dressing for our next sampling.

SOUTH DOLCOATH.—W. Roberts, Sept. 13: In the 56, driving east of the flat-rod shaft, the lode is 1 ft. wide, chiefly fluor-spar, and occasional stones of ore. The cross-cut at the 46 is progressing favourably; we cannot drive east on the course of the lode until a communication is made to the winze for ventilation.

SOUTH LOVELL.—Capt. Chappell, Sept. 14: Driving the 12 fm. level east, the lode is 2 ft. wide, worth fully 25l. per fm. Lode in the same level west is about 1 ft. wide, composed of peach, prian, and good stones of tin, but I believe the main part of the lode is standing to the south. After driving a few more fathoms west, I purpose cross-cutting. The lode in the east end, discovered in the cross-cut west of shaft, is 15 in. wide, and greatly improved, now worth 6l. per fm.; driving for 15s. The lode in the same level west at present is rather disordered and broken up in branches, occasionally producing rich stones of tin, but not at present sufficient to value. Our progress at present is rather slow in clearing and securing the adit level to engine-shaft. We propose sinking engine-shaft in about a fortnight from this time, in bottom of which the lode is 2 ft. wide, and worth 12l. per fm. The indications in bottom of shaft and 12 fm. level east are highly encouraging, and the lode altogether is very promising to open up a good and profitable mine.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 9: In the adit west the men are engaged driving south through the elvans, so as to get under the shaft in these elvans; we find branches of spar and prian, containing tin, dipping towards the lode. The men are making as much progress as they possibly can with the sinking of the engine-shaft and fixing of the engine.

SOUTH WHEAL TOLGUS.—Sept. 13: Youren's Lode: In Michell's engine-shaft, sinking below the 180 fm. level, the lode is 2½ ft. wide, consisting of peach, quartz, and mundic, with occasional stones of ore—a strong open lode. The lode in the 150 fm. level west is 2 ft. wide, composed of killas, spar, and mundic intermixed. The ground in the 150 fm. level cross-cut south is moderately easy. In the 140 fm. level west the fathom. The lode in the 130 fm. level west is 15 in. wide—unproductive. In the 130 fm. level west the lode is small and unproductive. In the 120 west, on the south part, the lode is 1 foot wide, consisting chiefly of mundic.—South Lode: In the rise over the back of the 140 fm. level east the lode is 3 ft. wide, producing 1 ton of ore per fathom. In the rise over the 130 fm. level east the lode has not been taken down since last reported. The lode in the winze sinking below the 130 east is producing 4 tons of ore per fathom. We have 3 fms. to sink and rise to communicate. The ground in the 116 fm. level cross-cut, driving south on the cross-course, is easy. In the 120, on the south part, driving east, the lode is 8 in. wide, producing 1 ton of good ore per fathom, and the level promising for improvement. The lode in the 100 fm. level west is 1 foot wide—unproductive.

87. IVES WHEAL ALLEN.—J. Nancarrow, J. Daniel, Sept. 13: Roderick's engine-shaft yields tin to save, and we expect further improvement. The 40 east is worth 5l. per fm. The east stope, in back, is worth 6l. per fm. The middle stope is worth 5l. per fm., and the west stope 5l. per fm. The lode in the 40 west is small, and there is no tin at present to value. The stope below the 20, west of Louisa's, is worth 3l. per fm. The east stope, below the 20, is worth 7l. per fm. All our operations are on tutwork. The cost of stoping is about 4l. per fm. We sold on Wednesday 3 tons 19 cwts. 3 qrs. 24 lbs. of tin, realising 149l. 18s.

ST. JUST UNITED.—R. Pryor, W. R. Rattar, Sept. 13: Saveall's Lode: The lode at the shaft sinking under the 62 is worth 10l. per fm. The lode in the 20, driving east of shaft, produces stones of tin.—North Lode: The lode at the shaft sinking under the 86 is worth 3l. per fm. The lode in the 86, driving east, is worth 3l. per fm. Driving west it produces stamping work. We have set the 62 to be driven east of the junction with Saveall's lode, in the western part of the mine, where the lode is worth 4l. per fm. —Rock Lode: The lode in the 69, driving east of shaft, is worth 5l. per fm. The lode in the winze sinking under the 40 is worth 4l. per fm.—Owl Lode: The lode in the 50, driving north of shaft, is worth about 3l. per fm. In the 10, driving north, the lode is worth 3l. per fm. All the other bargains are without change since the last report.

TERRAS.—T. Parkyn, Sept. 13: The water stamps are kept at work regularly, and the yield of tin is increasing in the cutting in depth, and this month's return of tin will be the best batch ever had in the mine. The prospects here are excellent. I am better pleased than ever, and nothing is wanting but a large number of stamps to make large profits.

TOLCARNE.—Sept. 13: Field's Lode: The lode in Field's shaft, sinking below the 60 fm. level, is 18 in. wide, consisting of spar and gossan, with occasional stones of ore—a kindly lode. In the 60 fm. level east the lode is 18 in. wide, consisting of fluor and other spar, and good stones of ore; this is and has been a very promising level for several fathoms. The ground in the 60 fm. level cross-cut north is rather hard. In the 50 fm. level east the lode is 10 in. wide, composed of gossan and spar. The lode in the 40 fm. level east is 15 in. wide, composed of gossan, soft spar, and prian—unproductive. In the 30 fm. level east the lode is 15 in. wide, producing 1 ton of ore per fathom; and the lode in the winze sinking below the 30 fm. level is 15 in. wide, producing 1 ton of ore per fathom. The lode in the rise over the back of the 20 fm. level east is 15 in. wide, composed of gossan and spar. In the 10 fm. level east the lode is 1 foot wide, consisting of gossan and soft spar. The same remark will apply to the adit level east. The ground in the adit level north is easy; this level is now driven 16 fms. north of Field's lode; we have not met with anything worthy of notice in it, and we intend to suspend it. In the adit level south the ground is easy for driving.—New North Lode: The lode in the 50 fm. level, east of cross-cut, is 8 in. wide, producing ½ ton of ore per fathom. In the 50 fm. level west the lode is split into three branches, together 15 in. wide—unproductive. The lode in the rise over the back of the 50, west of cross-cut, is 10 in. wide, producing ⅛ ton of ore per fathom. In the 40 fm. level east the lode is 10 inches wide, yielding ⅛ ton of ore per fathom. The lode in the winze sinking in the 40 fm. fm. level west is 1 ft. wide, saving work, opening tribute ground.

TOLVADDEN.—F. Gundry, Sept. 14: The 103, east of the engine-shaft, has been driven in the present week 4 ft., but the leader, which has been yielding the ore, is not taken down, which will be done in the coming week, after this we shall be prepared to report on the value of the lode. The lode in No. 1 winze, sinking below the 93 east, is still looking well, and will at present yield 4 tons of ore per fathom; this winze is still 4 fms. east of the 103 fm. level end. No. 1 winze, sinking below the 67, west of Gundry's shaft, on the tin ground, is now sunk 2 fms. 5 ft.: the lode throughout this winze is worth 10l. per fathom; this is entirely in whole ground. We sampled yesterday 271 barrows of tin ore.

TRENCROM.—W. Arthur, H. Woolcock, Sept. 14: The lode in the 110, east of Hollow's, is 15 in. wide, worth 5l. per fm. The lode in the 100, east of Hollow's, is 12 in. wide, worth 2l. per fm. The lode in the 90, east of Hollow's, is 18 in. wide, worth 5l. per fm. The lode in the rise above the 80, east of Hollow's, is 10 in. wide, producing a little tin. The lode in the 70, east of Hollow's, is 16 in. wide, worth 4l. per fm. The lode in the 60, east of Hollow's, is at present disordered by a horse of granite. The lode in the rise in the back of the 50, against Dawe's shaft, is 15 in. wide, worth 4l. per fm.

TREVENEN AND TREMENHEERE.—J. Medlen, C. George, Sept. 13: Trevenen shaft has just reached the 182. The driving will commence here next week; the lode is large, and very congenial, yielding a little tin, but scarcely enough to value. The lode in the 172, east of this shaft, is split; the north part, on which we have been driving lately, is poor. We are now about to cross-cut to the south part, which we suppose to be within about 6 fms. of us. No. 1 stope, in the back, is worth 5l. per fm. Nos. 2, 3, and 4 are each worth 3l. per fm. The stope in back of this level, east of new sump-shaft, is worth 5l. per fm. The ground is still good in the cross-cut, and good speed is being made in driving it, but no more branches cut. No change in the tribute department to call for remark.

VALE OF TOWY.—A. Waters, T. Harvey, Sept. 12: The stopes in the back of the 124, north of Field's shaft, are without change since our last report, then worth 2 tons of blende per fm. Jones's end, driving north of shaft in the 116, will be communicated to No. 1 winze by the end of this week, we shall then have stoping ground in the back and bottom. Williams's stopes, in ths 116, south of shaft, is worth 1 ton of blende per fathom. Harris's winze, below the 110, north of shaft, under Curtis's pitch, is worth 2 tons of rich blende per fathom. Curtis's pitch, in the 110 north, is worth 3 tons per fathom. Ree's pitch, in the same level, is worth 2 tons per fathom. Rowe's pitch, in the 110, south of Wenallt's, is worth 2 tons of blende per fm.

VIGRA AND CLOGAU.—J. Romfry, Sept. 11: In the 10, No. 1 mine, a great improvement has taken place in the lode, being less mixed with carbonate of lime; the same I am able to say of the lode in the 5 fm. level.

— Sept. 13: I have commenced stoping down the ground standing between the shallow adit and surface, some of it being good stamping stuff.—No. 1 Mine Shaft—No. 2 Mine: The men are progressing well, considering the hard ground, the lode is changing every day for the better, and we are gradually getting out of the coarse band of quartz. In No. 2 shaft we have commenced to rip down a piece of ground west, close to where we found the first visible gold. In the new adit we have struck the greenstone; our progress now will be slower in driving. All our surface men are working on the line, 300 yards of which I hope to have completed by to-morrow.

WALKHAM AND POLDICE.—John Lean, Sept. 9: In the 50, north of shaft, the ground still continues favourable for extending the level. In the past month we have driven 7 fms. 3 ft. 6 in., making the length from shaft 13 fms. 2 ft. 6 in.; a large stream of water is flowing from the end, which indicates that we are approaching the lode; set to six men, 5 fms., at 3l. 10s., or to cut the lode at the same rate per fathom. In the north stope, in the 38 north, the lode is 2 ft. wide, and producing copper ore, stones of lead, with blende, saving work. In the south stope, in the same level, the lode is 1 ft. wide, yielding good work for copper ore; set to two men and two boys, at 55s. per fathom. The winze below the 26 is down 6½ fms.; lode producing good stones of copper ore; set to four men, at 4l. 15s. per fm. I expect this winze will communicate with the stope in the 38 in about three weeks; this will give good ventilation in this level.

WELSH GOLD.—W. Vincent, Sept. 14: We have this day cut into some good visible gold at Cefn Coch, and you shall know more about it in a day or two.

WEST BEAM.—W. Hosking, Sept. 14: Brothers engine-shaft is sunk 10 fms. 2 ft. below the 45, and the ground continuing of the same favourable character as heretofore. The cross-cut driving south of Brothers engine-shaft, at the adit level, is extended 45 fathoms; the ground here continues very congenial, and admits of being driven at 2l. per fathom. Our tribute pitches, of which we have four, in the back of the 45, east of Parry's shaft, are yielding very satisfactorily, and are being worked by 14 men, at an average tribute of 12s. in 1l. We have also set a pitch in bottom of the 55, east of shaft, on North Beam lode, to two men, who are breaking good work. The tributers at the 14 fm. level have extended the end 4 fathoms east since my last report, and have laid open ground which they are now taking away at 7s. in 1l. tribute. At the Union Mine we have just now effected a complete drainage of the 10 below adit, where we find much whole ground that can be taken away profitably; we have already set one pitch to four men, and as the men proceed with the clearance of the debris, resulting from long abandonment, we shall be able to let others at paying rates. The tributers on this lode, west of Teague's shaft, are also making fair wages.

WEST CARADON.—W. Johns, Sept. 13: We are forcing on every point of operation as heretofore, but without any particular change to notice since last report. In the 104 west, on Jope's lode, the lode is not looking so well, by means of a hard floor of ground coming in contact with the lode; this, however, we only regard temporary, believing it will become again valuable. The winze sinking below the 104 in the cross-course is down to the 128; we have commenced to drive north towards the end, and hope to effect a communication shortly, after which we shall quickly cut the lode at this level (128), and also put us in a position to drive a midway level (116) for opening out ground to a much greater advantage. We have sampled on Sept. 11 (computed) 192 tons of copper ore of our usual quality.

WEST MARIA AND FORTESCUE CONSOLS.—W. Skewis, J. Donnal, Sept. 9: The ground in the 50 cross-cut, north of Maria engine-shaft, is a light clay-slate, of a good description, with beautiful floors of prian, which we consider altogether favourable for the production of copper ore. The 50, east of this shaft, is driving by the West Maria lode in a favourable channel of ground; the same remark will apply to the 40, west of Holman's cross-cut, west of Maria engine-shaft, on Capel Tor lode. The ground in the rise in back of the 40 west has a little improved. The lode in the tribute pitch in back of the 30, east of this shaft, on Devon Consols lode, is not looking so well as when last reported. The lode in the 20, east of Maria engine-shaft, on Capel Tor lode, is at present small and poor; the ground is good, and a little more water coming from the end, which indicates a favourable change. The drivage in the 20 west, on Capel Tor lode, is by the side of the lode; when last taken down it was from 3 to 4 ft. wide, yielding 3 tons of ore per fathom. The lode in the stope in bottom of the 20 east, east of Anstis's winze, is 4 ft. wide, yielding 4 tons of ore per fm. There is no change to notice in the winze sinking in bottom of the 12, west of new shaft. The ground in the new shaft, sinking below this level, has improved, but the water has much increased, which is retarding the progress; we hope, however, to get it deep enough to reach the 20, from West Maria shaft, in five or six weeks from this time.

WEST WHEAL TOLGUS.—Sept. 13: South Lode: Taylor's engine-shaft men are progressing favourably in sinking the shaft below the 75. In the 75 east the lode is 18 in. wide, producing 1 ton of ore per fathom. The lode in the 75 west is 3½ feet wide, producing 2 tons of ore per fathom. We have two stopes over the 75 east, working by twelve men, each stope yielding 2 tons of ore per fm.; and the two stopes over the back of the 75 west are each yielding 3 tons of ore per fm. In the 65 west the lode is 2¼ ft. wide, producing 3 tons of ore per fm. The lode in the rise over the 65 west is 18 in. wide, producing 1 ton of ore per fm. The lode in the 75, west from Wheal Raven engine-shaft, is 2 ft. wide, consisting of fluor-spar and mundic.—North Lode: In the 65, east of Taylor's engine-shaft, and east of the cross-cut, the lode is 20 in. wide, producing 1 ton of ore per fathom. The ground in the 50 fm. level cross-cut north is moderately easy.

WEST WHEAL VOR.—J. Southey, Sept. 13: No alteration worthy of notice to report since my last. The completion of the flat-rods from Gundry's to Gutierrez's shaft is in a forward state. The engine and pitwork continue to work satisfactorily.

WHEAL AGAR.—Wm. Roberts, Sept. 13: In the 110, east of Windstow shaft, the lode is 2 ft. wide, composed of stones of copper ore, and saving work for tin. In the 110, west of shaft, the lode is 1 ft. wide, producing stones of ore. In the 100 east the lode is 2 ft. wide, chiefly flookan and spar. In the 90 east the lode is 2½ ft. wide, composed of blende, and good stones of ore, a very promising lode.—Western Engine-shaft: The lode in the 100 east is 1 ft. wide, saving work for tin and copper ore. In the winze below the 90 the lode is 2 ft. wide, producing a little tin, not sufficient to value.—Whim-shaft: In the 130 east the lode is 1½ ft. wide, saving work for tin.—Dobree's Lode: In the 90, east of cross-cut, the lode is 1½ ft. wide, producing good stones of ore.

WHEAL BASSET AND GRYLLS.—J. Wilkin, W. Harris, W. Oats, jun., Sept. 8: During the past month the 32 fm. level, east of Robartes's shaft, has been driven 5 ft. 7 in. —the lodes poor; the men have been stoping in the back of the level during the latter part of the month; lode not taken down. A winze in the bottom of the 22 fm. level over these stopes has been sunk 1 fm. 3 ft. 6 in., and we hope to communicate this winze to the stopes in the coming week, and lay open some tribute ground. The 40, west of Wheal Fat, has been driven 1 fm. 2 ft. 6 in., lode not seen; set to drive by four men, at 6l. per fathom. The 30, west of Wheal Fat shaft, has been driven 1 fm. 1 ft. 6 in., lode improving, and in the present end worth 10l. per fm.; set to drive by four men, at 8l. per fathom. Tyacke's engine-shaft, sinking below the 54, has been sunk 1 fm., and is now down 10 fms. 5 ft.; a bargain has been set to cut shaft, to case, divide, and bring down skip-road, by six men and three boys, at 30l. for the contract; we have a change of ground for the better in the bottom of this shaft, and expect when we begin to sink again to set for half the price we gave last month. The 54, east of Tyacke's shaft, has been driven 2 fm. 1 ft. 5 in., opening tribute ground; the same level west has been driven 4 ft. 6 in., lode not taken down; set to drive by four men each way, at 7l. per fathom. A winze in the bottom of the 44, west of Tyacke's, has been sunk 4 fms. 2 ft. 6 in., lode worth 6l. per fm.; set to sink by four men, at 4l. per fathom. The 44, west of Tyacke's, has been set to drive by two men, at 8l. per fathom. Gundry's shaft, sinking below the 60, has been sunk 1 fm. 0 ft. 3 in.; set to sink by six men, at 10l. The 60, east of Gundry's, has been cleared and driven 2 fms., opening tribute ground; the winze from the 50, has been communicated to the rise from the 60, laying open some good tin ground about half way from level to level; we hope this tin will dip east, and be found in driving the 60 fm. level; this level is set to drive east, by four men, at 2l. 10s. per fathom. The 60, west of cross-cut, on the Tymorgn branch, has been driven 3 ft. 6 in., producing a little tin; set to drive by two men, at 2l. 10s. per fathom.—Wheal Foster: The rise from the 34, east of cross-course, south of Tyacke's, has been communicated to the winze sinking below the 25, west of Dumpling shaft, thereby giving ventilation, and assisting the drainage of Wheal Foster. The 34, east of winze, has been driven 2 fms. 5 ft., lode poor; set to drive by six men, at 5l. per fathom.; the same level west has been driven 3 fms. 0 ft. 9 in., lode improving, and yielding low-priced stamping work; set to drive by six men, at 5l. per fathom. Drigger's shaft, sinking below the 35, has been sunk 1 fm. 4 ft. 6 in., and is now down 9 ft. 2 in. below the 35 fm. level.; set to sink by six men, at 18l. per fm.; we hope soon to see the lode at the 45 fm. level. The 35 fm. level east has been driven 7 fms. 0 ft. 6 in., lode worth 10l. per fm.; this level has been communicated to cross-cut from the old level, on the north lode, and we have now four pitches set in it, varying from 4s. to 10s. in 1l. tribute; the end is set to drive by four men, at 5l. per fathom. The 25 fm. level, east of Drigger's, has been been cleared 20 fms., lode in the back taken away, and some of the bottom; we intend to set a winze in the bottom of this level shortly, and hope to sink in some good tin ground. In the 15 fm. level, south of Digger's, we have had a run, and have been obliged to drive a side tye 5 fms 3 ft.; this has been holed, and the water on the Dippa lode let down; we have four men repairing and securing the level. The cross-cut north of Tyacke's lode, east of Gundry's, has been driven 1 fm. 4 ft. 7 in., no lode seen; set to drive by four men, at 6l. per fm. The steam-whim has been got ready to work, and answers very satisfactorily, and we expect to get the skip-road complete to the bottom of Tyacke's shaft by the end of next week, after which we shall proceed to lay in skip-roads in Gundry's and Drigger's shafts; in the other shafts we shall draw with kibbles. On the whole, our prospects are much the same as in time past. Tin sold to the Carvedras Co. on Aug. 22, 968l. 14s. 11d.

WHEAL CREBOR.—J. Gifford, Sept. 12: The shaftmen are engaged in rising to communicate with the old mine in back of the 96. We are driving by the side of the lode in the 108, both east and west, and shall commence cross-cutting the lode in the 108 west on Monday next. In the cross-cut south in the 96 west the ground is still good for driving. In the 96 east we took down the lode, which is 2 ft. wide, yielding 1 ton of copper ore per fathom. In the stope in bottom of the 84 east the lode is worth 7l. per fm. In the 84 east the lode is 3 ft. wide, composed of capels, quartz, with spots of mundic and copper ore intermixed, but of no value yet—a kindly lode. In the 84 east the ground is good for driving. The pitch in back of the 84, east and west of Walter's winze, is worth 10l. per fm. No change to report in other tribute pitches.

WHEAL EDWARD.—Geo. Rowe, Sept. 9: The lode in the 61 west is 20 in. wide, composed of capel, spar, mundic, with good stones of ore. There is nothing new in the tribute department.

WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Sept. 9: The lode in the 120 west is 2½ ft. wide, and producing stamping work for tin. The lode in the 110 east is 2 ft. wide, and producing a little tin. The lode in the 110 west is 5 ft. wide, worth 12l. per fathom. Three stopes above this level are worth 10l., 8l., and 7l. per fm. The lode in the 100 east is small, but it yields a little tin. The lode in the winze sinking below this level is 2½ ft. wide, and worth 10l. per fm. Two stopes above this level are worth 9l. and 8l. per fm. The lode in the 100 west is 2 ft. wide, producing a little tin. The lode in the stope above this level is worth 6l. per fm. The lode in the 90 east is 2½ ft. wide, worth 10l. per fm. The lode in the stope above this level is worth 10l. per fm. The lode in the 90 west is 2½ ft. wide, worth 8l. per fm. The stopes above the 80 are yielding about the same quantity and quality tinstuff as we stated last week. The lode in the rise above the 66 east is worth 8l. per fm. The lode in the 66 west is 18 inches wide, and yielding a little tin. The lode in the winze sinking below the 54 east is 2 ft. wide, and worth 8l. per fm. The lode in the 54 west is 2½ ft. wide, worth 7l. per fm.

WHEAL GRYLLS.—Edward Rogers, Edmund Rogers, Sept. 14: In the 40, driving east of the flat-rod shaft, the ground is hard, and the lode small and poor. In the rise in the sank of the 30, east of the Pressure shaft, the lode is just the same as last reported on—worth 10l. per fathom. In the 20, driving east of this shaft, the lode is 1 foot wide, worth 8l. per fm. In the winze in bottom of this level the lode is worth 18l. per fm.

WHEAL HARRIETT.—S. Williams, Sept. 9: The lode in the 130 west end, from east cross-cut, is unproductive. The lode in the 115 west end, from east cross-cut, is spotted with copper ore. The lode in the 115 east end, from west cross-cut, is producing stones of copper ore. The lode in the stope above the 115 is worth for copper ore 7l. per fathom. The lode in the 90 east end, from the north cross-cut, is worth for copper ore 4l. per fathom.

WHEAL KITTY (St. Agnes).—W. Polkinghorne, S. Davey, Sept. 9: There has been no lode taken down during the past week in the 82, driving west of Holgate's shaft.—New Shaft, Pryor's Lode: In the 65, driving west of shaft, the lode is worth for tin 10l. per fathom. In the 65, driving east of shaft, the lode is still small, and not to value. In the 54, driving west of shaft, we are at present deuing the lode. In the 54, driving east of shaft, the lode is without change, worth for tin 8l. per fm. In the 44, driving west of shaft, the lode is worth for tin 8l. per fm. In the 44, driving east of shaft, the lode is worth for tin 8l. per fm. The lode in the adit level, driving west of cross-cut, is still showing a good appearance.

WHEAL KITTY (Uny Lelant).—W. Williams, Sept. 14: North Rassoe Lode: The lode in the winze sinking below the 140, west of Bolitho's rise, is worth 4l. per fm. The rise in the back of the 140 is worth 6l. per fm. The stope in the back of the 140 is worth 4l. per fm.; stoping at 35s. per fm. The lode in the 130 fm. level end, west of Bolitho's rise, is worth 5l. per fm. The 130 fm. level end east is worth 3l. per fm. There are two stopes in this level worth 12l. and 6l. per fm.; stoping at 35s. per fm. The lode in the 120 fm. level end, west of Bolitho's rise, is worth 10l. per fm. The lode in the 120 fm. level end east is worth 3l. per fm. The stope in the back is worth 5l. per fm.; stoping at 35s. per fm. The lode in the 110 fm. level end west is worth 4l. per fm. We have commenced Bolitho's rise above the 110; at present the lode is small. The 140 and 90 fm. level cross-cuts are being pushed on as fast as possible. There is no change to notice in the Gowan lode.

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stevens, Sept. 12: Clymo's shaft-men are still engaged fixing new pitwork. The cross-cut at the 210 is extended 1 fm. towards the lode. In the 200, north of Clymo's shaft, the lode is 2 ft. wide, producing stones of lead; in the same level south it is 2½ ft. wide, worth 8l. per fm. In the 190 north it is 2½ ft. wide, producing stones of ore; in the same level south it is 3 ft. wide, worth 8l. per fm. In the 180 north it is 2 ft. wide, worth 4l. per fathom; in the same level south it is 2 ft. wide, worth 7l. per fathom. There is no improvement in the 170, north of Pollard's shaft, since last reported on. The stopes and pitches are producing much as usual. We sold on the 7th inst. two parcels of lead ores—No. 1, computed 78 tons, to Messrs. Stock and Co., at 23l. 15s. 6d.; and No. 2, computed 25 tons, to Messrs. Stock and Co. and Messrs. R. Michell and Son, at 9l. 10s. 6d. per ton.

WHEAL NORRIS.—J. Andrews, Sept. 9: At our setting to-day the following bargains were let:—Carter's shaft to sink below the 57, by nine men, at 18l. per fm. The 57 end to drive east of Carter's, by six men, at 3l. 15s. per fm. The 45 end to drive east of shaft, by two men, at 3l. 5s. per fm. The 45 end to drive east of cross-cut, on new lode, by four men, at 10l. per fm. A stope in back of the 45, on No. 4 lode, by six men, at 1l. 15s. per fathom.

WHEAL SPARNON.—W. Tregay, E. Chegwin, Sept. 9: The summen have been employed shooting out the ground on the south side of the lode at the 60, preparatory to sinking for a fork below that level; the sand and slime coming rapidly from the level have hitherto somewhat impeded the progress in getting down the sump, and we expect this hindrance to continue until the stuff from this level has been nearly run out, which is being done as fast as the engine can pump it out. There has been nothing more opened on the tin part of the lode since last reported. In the 20 west end the north lode is small, producing stones of copper ore. In the 20 east rise the new lode produces good stones of copper ore, but we do not expect it to become regularly productive until getting through the elvan. In the 20 north cross-cut nothing of importance has been intersected since last reported. The men putting in skiproad at the old sump have had much ground to cut and secure in the old shaft, and have consequently not made equal progress with last week, but expect next week to get on more rapidly.—Belfry's Shaft: The 45 south cross-cut or level, on Cobalt lode, has required timbering all the distance cleared for the week, ground having apparently been all worked away for cobalt. We have not yet reached any of the important lodes intersected by this cross-cut.

WHEAL UNION.—T. Glanville, Sept. 8: Tutwork Setting: The flat-rod shaft to sink below the 100 fm. level, by six men, at 40l. per fathom; the lode is 4 ft. wide, producing stones of copper and tin ore. The 100 fm. level to drive west of the flat-rod shaft, by six men, at 8l. per fathom. The 70 fathom level to drive east of the flat-rod shaft, by six men, at 16l. per fathom. The engine-shaft to sink below the 40 fm. level, by nine men, at 36l. per fathom. The 60 cross-cut to drive north from East Carn Brea, by six men, at 15l. 10s. per fathom. The old engine-shaft to sink below the 40 fathom level, by nine men, at 10l. per fathom. The 40 cross-cut to drive south of the old engine-shaft, by six men, at 5l. 10s. per fathom. The 20 fm. level to drive east of the engine-shaft, by two men, at 4l. per fathom.

WHEAL UNITY CONSOLS.—Wm. H. Reynolds, Sept. 14: There is nothing new since my last report; we have about 22 tons of ore ready to sample, which we think worth towards 200l.

WHEAL UNY.—S. Coade, M. Rogers, Sept. 9: The 120, east of the engine-shaft, is worth 12l. per fm.; the 126 west, 8l.; the 110 east, 10l.; the 120, west of incline shaft, 8l.; the 120, east of incline shaft, 8l.; and the 110, west of incline shaft, 5l. per fm.

RECENT AMERICAN PATENTS.

TREATING ORES.—Robert Spencer, of New York, claims—Applying a series of revolving or oscillating wings or paddles within a vessel which is

leave projecting studs corresponding to similar studs in the forward end of the gripping-box, in such manner as that the momentum feed shall be alternated by blows under full head of steam, substantially as set forth.—8. In combination with the means described for producing rotary motion of the tool, I claim the auxiliary ratchet and dog, or the mechanical equivalent thereof, for the purpose of preventing the tool from turning back after each rotation, substantially as set forth.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

NORTH WHEAL ROBERT has sent off samples for 10 tons of tin, which is now ready for sale, and they are preparing a parcel of copper ore. At the next meeting the financial position will be found to be much better than at the last.

WEST MARIA AND FORTESCUE.—A visit to these mines must afford great satisfaction to the holders of shares therein (which are held principally in Glasgow)—as presenting a very decided prospect of their being rewarded for their outlay in machinery, &c., by having a productive mine. The 20 fm. level, on Capel Tor lode, has been driven through a productive lode for copper for above 20 fms. in length, this drivage alone producing above 80 tons, leaving good backs for stoping, and from which large quantities of copper will be returned as soon as the winzes are sunk from the 12, and the drivage in the 20 east on the lode is communicated with the new shaft, now sunk to the 20 fm. level. In the 40 a cross-cut has been driven and intersected the same lode 3 ft. wide, some 40 fms. west of the present workings, producing good work for copper, and is being driven on with all speed. A cross-cut is being put out in the 50, which will reach the lode in about ten weeks, and from appearances in the 40 warrants good results. These two levels are going west in whole ground to surface, and will give a run of ore ground already opened on 80 fms. in length; and from the discoveries already made on this lode, independent of other lodes opened on productive in this sett, these mines will in a short time be in a position to make larger returns than any in this district, except Great Devon Consols. I must particularly mention that within the last few months the character of the ground has greatly improved; a finer killas cannot be seen for the production of copper. Mining men will do well to pay attention to these mines, by paying them a visit.

NEW CLIFFORD.—A large portion of the new engine is on the mine, and the utmost vigour is being exercised to get it erected and at work at once. Three pares of tributers are at work, and reported to be earning good wages. The stamps will be completed by the end of this month.

ROSEWARNE UNITED would appear to be an excellent investment. The next sampling, it is said, will be 200 tons of good copper ore, being 45 tons more than the last sale.

EAST BROOKWOOD.—The cross-cut in the 20 going north is progressing satisfactorily, and in the same good branches of mundic, mixed with copper, have been met with dipping towards the north lode, which is expected to be intersected in about 4 fms. driving, 25 fms. from surface. The drivage on the old lode, in the 20 east, is producing saving work.

TRENCROM MINE is still opening up well, and will soon become one of the leading properties of that great and well-known tin-producing district. The largely increasing returns of the mine will soon enable good dividends to be paid.

HINGSTON DOWN MINE is still looking well, and even improving; this appears to be the next mine for the Dividend List.

DEVON AND CORNWALL UNITED MINES have every appearance of becoming good and lasting mines. The ore is improving in quantity and quality, good profits are now being made, and dividends will follow.

THE GLAMORGAN IRON AND COAL COMPANY.—As soon as the application was made to the Committee of the Stock Exchange for the appointment of a special settling-day in the shares of this company, many doubts were expressed in different quarters as to the success of the application. The dealings, it will, no doubt, be recollected, were very large, and the shares reached a high premium in the market. The Committee, however, after a minute investigation, unanimously passed the following resolution:—"That this committee, finding serious discrepancies between the prospectus and Articles of Association of the Glamorgan Iron and Coal Company (Limited), and also that there were many objectionable practices in the promotion of the company and in the allotment of shares, decline to appoint a settling-day."

THE RUSSIAN (VYKSOUNSKY) IRONWORKS COMPANY.—At the special meeting, on Wednesday (the details of which appear in another column), it was unanimously decided to amend the Articles of Association, so as to vest the power of increasing the capital in the hands of shareholders, instead of the directors. The purpose of this amendment is to remove the objection upon which the Stock Exchange Committee refused the application for a special settling-day; and now that the Article has thus been amended the directors feel themselves fully justified in re-applying to the Committee for the privilege of quotation in the Official List. It is distinctly stated that the clause in question was inserted because it was common in Articles of Association, the directors never having contemplated the exercise of the power therein given, and simply because they confidently believe that the present amount of capital will be ample to fully develope the resources of the extensive property which this company has acquired. Should the Committee again refuse the application of the directors, it is by no means improbable that the undertaking will be altogether reconstituted.

TITANIC IRON SANDS.—The object of the invention patented by Mr. Bonnet F. Brunel, of Brussels, is to reduce titanic iron sands, such as those found in Italy and at Taranaki, to powder, fit for various commercial uses, and amongst others—first, to the manufacture of inoxydisable paint; second to all purposes to which emery is applicable; and third, as the chief base in the composition of metallic cements used for luting the joints of metal pipes and other articles. He first subjects the sands to the action of grinding-mills, in which the grinding surfaces are composed of iron and steel, to reduce them to fine powder, and he introduces during the reduction a stream of water and steam to heat the stuff to from 140° to 175° Fahr. The powder is thrown out of the mill into a receiver, it is taken damp from the receiver, and placed into retorts made of refractory earths, and is carried to a bright red-heat, and well stirred; during the stirring he introduces for about half-an-hour, more or less, a current of steam; he then shuts off the steam, and introduces powdered charcoal, and agitates the mass for about a quarter-of-an-hour, and then, by means of a fan or blower, passes over the mass, for about half-an-hour, a current of atmospheric air *coming from the direction of the magnetic pole.* After this the contents of the retorts are removed while still red-hot, and are allowed to cool in the air, being well stirred. The powder is afterwards sifted, and is ready for employment in substitution for emery, as the base for metallic cement, and as a paint for general use. For the manufacture of paints for painting iron and steel, he introduces the powder prepared as before described into cylinders, for the purpose of magnetising it. The cylinder is surrounded with copper wire, and connection is made with the battery; at the end of about five minutes the titanic sand will be found to be permanently magnetised.

EXTENSIVE APPLICATION OF CLAY.—In connection with the valuable deposit of terra-cotta clay discovered on the property of Mr. G. T. Allen, of Watcombe, near Torquay, we understand that that gentleman intends taking off the superincumbent brick earth over two acres, which bears a great affinity to the terra-cotta, so that there will be produced shortly a most excellent hard constructive and fancy brick, both being in great request in the neighbourhood, for the local bricks are miserable. The supply will be at least 10,000 per day for seven years, and would easily, as the whole of that part of the land is more or less upon an incline, and the brick-earth can be cut down as it may be wanted. It is a great pity that there are no terra-cotta works in the county, as considerable orders are obtainable which at present have to be referred to Staffordshire and Lincolnshire for execution. Whilst this is going on in Devonshire an equally important development of clay is proposed in Flintshire, where recently discoveries have been made of a new clay, highly adaptable for the purposes of fire-brick, tiles, and fancy earthenware, and which does not contain a particle of sand in its composition. Perhaps the only difficulty in the way is that, unlike the Buckley clay, it is not upon the surface. But this objection is easily overcome by the company upon whose property such a valuable deposit is found being willing to raise it at the rate of 1s. per ton. There is also a good supply of coal to be had close at hand, and, perhaps, what is of greater importance, there is a line of railway within a 100 yards of the bank, thus giving easy transit to the goods after manufacture. The seam of clay, or "warrant," underlies the coal measures, and averages about 9 ft., and is not more than 30 yards from surface.

NEW INVENTIONS.

PROVISIONAL PROTECTION for six months has been granted for the following:—

CHARLES DE BERGUE, Strand, engineer.—Improvements in the manufacture of iron piers or erections, applicable more especially for carrying bridges at high elevations, or available for shear-legs and lighthouses. June 5.

M. H. BLANCHARD, Blackfriars-road, Surrey.—Improvements in the manufacture of terra-cotta or vitreous stone. Aug. 10.

J. KNOWLES, Eagley Bank, near Bolton, Lancaster.—Improvements in machinery for lubricating the axles of colliery and other similar wagons or trucks. Aug. 12.

J. T. LOCKEY, Sutton, Lancaster.—Improvements in and connected with the manufacture of copper. Aug. 14.

LETTERS PATENT have been issued for the following:—

M. MORGAN, Somerset, engineer.—Improvements in converting cast-iron or pig-iron into wrought-iron or steel, and in machinery connected therewith. March 8.

J. CLIFF, Wortley, near Leeds.—Improvements in the construction of hot-air stoves for blast-furnaces. March 9.

R. M. ROBERTS, Dolgelly, North Wales.—Improvements in apparatus for treating [metals and metallic ores. March 13.

J. FARRAR and E. BOOTH, Barnsley.—Improvements in machinery and apparatus for mining or working coal and other minerals. March 16.

LIST OF SPECIFICATIONS published during the week:—

Manufacture of iron, 4d.; securing rails or tramways used when getting coal, 10d.; machinery for getting coal, stone, &c., 8d.; consuming smoke in furnaces, 4d.; furnaces, 8d.

L. DE FONTAINEMOREAU,

India Office.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL, notice is hereby given that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the 18th inst., to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to supply—
SHEET COPPER; also ZINC.
And that the conditions of the said contracts (two in number) may be had on application at the India Store Office, Cannon-row, Westminster, where the proposals are to be left any time before Two o'clock P.M., of the said 18th day of September, 1865, after which hour no tender will be received. GERALD C. TALBOT, Director-General.
India Office, 8th September, 1865.

TO RAILWAY CARRIAGE, WAGON BUILDERS, AND OTHERS.—TO BE DISPOSED OF, BY PRIVATE TREATY, a WORKS in a very suitable position, having a siding to two principal railways, also water communication, and well adapted to carry on any description of business. Immediate possession can be given. Further particulars may be obtained; address, "A. M.," MINING JOURNAL office, 26, Fleet-street, London.

TO CAPITALISTS.—WANTED, a PARTNER in ONE of the MOST PROMISING COLLIERIES in NORTH WALES. The royalty is about 500 acres, and is already proved to contain four valuable seams of coals, adapted both for house and steam purposes, and the returns on the capital invested will be at least 50 per cent. annually. The capital is required for the full development of the concern, and if preferred the incoming partner may have the entire management, financially and otherwise.—Address, "W. 15," Post-office, Liverpool.

TO MINING COMPANIES.—An EXPERIENCED MINER, now in the Lake Superior district, is in WANT of an ENGAGEMENT. He has been employed as a miner over 30 years, and for the last 16 years has had the entire charge of extensive works, and is fully competent to superintend the opening of mines in any part—ordering and erecting the necessary materials and machinery, &c.—Letters addressed "Y. O.," MINING JOURNAL office, 26, Fleet-street, London, E.C., will be attended to with the least possible delay.

THE IRON TRADE.—A GENTLEMAN, who has had 25 years' experience in the MANAGEMENT of IRONWORKS for the MANUFACTURE of IRON, is now OPEN to an ENGAGEMENT. He undertakes the supervision of all operations, from the raising of the materials to the production of the finished articles, and conducts the general business of the establishment, undertaking, in fact, the entire management. Has planned and erected in several instances blast-furnaces (with gas arrangements), and forge mills, &c., in all their details. Can give the most satisfactory references.—Apply "W. L.," care of Editor of MINING JOURNAL, 26, Fleet-street, London.

COMMISSION AGENCY.—A GENTLEMAN, residing in the heart of the West Cornwall mining district is WILLING to UNDERTAKE the SALE of CANDLES, STEEL, ROPE, or any other MATERIALS USED IN MINING, on commission. The highest references will be given. Advertiser has a large mining connection. Apply, "H. W.," MINING JOURNAL office, 26, Fleet-street.

COPPER.—WANTED, an AGENCY for the SALE of COPPER in LONDON and BIRMINGHAM, by a gentleman who can give first-class references.—Address, "A. W.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

WANTED, a PARTNER to JOIN the ADVERTISER in an ESTABLISHED MINING OFFICE in the COUNTRY, the business of which is capable of extension.—For terms and further particulars, address "A. B." Post-office, Gunnislake, Calstock.—September 14, 1865.

WANTED, at the MORFA COPPER WORKS, SWANSEA, a MASTER HAMMERMAN. He must produce testimonials as to character and ability, and state wages required.—Apply to Messrs. WILLIAMS, FOSTER, and Co., as above.—Dated Morfa Copper Works, Swansea, Sept. 12, 1865.

A GENTLEMAN, of considerable mining experience, WISHES to OBTAIN a SITUATION as SECRETARY or MANAGER to a MINING COMPANY in LONDON, or would have no objection to go abroad. First-class references given.—Apply to "A. B.," MINING JOURNAL office, 26, Fleet-street, London.

A GENTLEMAN having an extensive connection with Merchants, Manufacturers, and others, would be GLAD to UNDERTAKE the SALE of PATENTED ARTICLES or INVENTIONS, on commission.—Apply to Mr. W. P. RAWLE, patent and mining agent, 8, Small-street, Bristol.

A YOUNG MAN, well educated and connected, having high certificates from the Royal School of Mines, DESIRES a SITUATION as CLERK or UNDERGROUND CAPTAIN, either at home or abroad.—Address, "M. E.," care of Mr. G. Street, 30, Cornhill, London.

ASSISTANT (EXPERIENCED) WANTS an ENGAGEMENT, at a moderate salary. Has managed several SALT and IRON ORE MINES in GERMANY, and can produce very high testimonials. Age 25, single. References to well-known authorities in above branches, as also to commercial firms in London.—Address, Dr. WARTH, 1A, Tower Royal, Cannon-street, London, E.C.

TWO RAILWAY BONDS (of £500 each, secured on a first-class Line), FOR SALE, to pay Ten per cent.—Full particulars of Messrs. BARNETT and Co., 9, Spring-gardens, Charing-cross, where their "Monthly Review of Railway and Mining Securities" can be had on application.

ELFORD, WILLIAMS, AND CO.,
COPPER ORE WHARFINGERS,
SHIP BROKERS AND COAL EXPORTERS,
METAL AND GENERAL COMMISSION AGENTS,
SWANSEA.
ELFORD, WILLIAMS, and Co. having erected an assay office, and engaged the services of a practical Cornish assayer, who will devote his whole time to this branch of their business, they are now in a position to make correct assays of silver, copper, and other mineral ores, on the most moderate terms.

RICHARDS BROTHERS,
MINE AGENCY OFFICES,
ABBEY MEAD, TAVISTOCK.

MR. ALBERT E. PRINCE, MINING ASSAY OFFICES, CAMBORNE, CORNWALL, is in a POSITION to GIVE ADVICE (through some of the most experienced agents) as to the BEST PAYING and SPECULATIVE INVESTMENTS. 1¼ per cent. charged on all mine share transactions.

MINING OFFICES, MANCHESTER.
THOMAS MOLYNEUX AND CO., MINE AGENTS, SHAREBROKERS, AND GENERAL COMMISSION AGENTS. Reliable information can be obtained as to purchase and sale of shares.
Office of the Hazel Grove Silver-Lead Mining Company (Limited), Flintshire. Prospectuses, reports, &c., of this valuable property may be had on application to No. 28 Princess-street, Manchester.

NORTH OF ENGLAND MINING AND ENGINEERING OFFICES, MANCHESTER.
MESSRS. HARVEY AND CO., MINING ENGINEERS, AGENTS, AND SHAREDEALERS, CLARENCE CHAMBERS, MANCHESTER, are at all times in a position to deal in all the market Dividend and Progressive Mine shares, and also to advise on all mining matters, being practically acquainted with the business, and having a daily communication from the mining districts of Devon and Cornwall.
Messrs. HARVEY and Co. publish a monthly "Mining Circular," containing a valuable summary of mining information. Forwarded gratis on application.
The Circular for September contains special reports on Leeds and St. Aubyn, Wheal Trevenna, Wheal Uny, East Chiverton, Cornish Clay and Tin Works, and Tin Hill.
Bankers: The Consolidated, Manchester; and the Alliance, Lothbury, London.

MR. J. SYKES, LEEK, NORTH STAFFORDSHIRE, has SPECIAL BUSINESS in DALE SHARES, and is always in a position either to BUY or SELL at close market prices.

ROBERT LIBBY AND SON,
MINE AND SHAREDEALERS, &c., CAMBORNE, CORNWALL,
Recommend the undermentioned mines for immediate investment:—

Wheal Trannack.	Crane.	Stray Park.
East Lovell.	Rosewarne United.	Margaret.
Wendron Consols.	North Dolcoath.	

Mines inspected by competent agents.

MR. CHARLES BAWDEN, INSPECTING MINE AGENT, ST. DAY, CORNWALL, OFFERS HIS SERVICES to CAPITALISTS SEEKING to INVEST in *bona fide* MINES.

Now ready, price 5s., by post 5s. 4d.,
THE MINES OF CORNWALL AND DEVON:
STATISTICS AND OBSERVATIONS.
By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker,
224 and 225, Gresham House, Old Broad-street, London, E.C.
It contains the following particulars, viz.:—The geological position, present prospects, names of purser, manager, and secretary, with statement of the annual returns of each mine during the last three years, and of total dividends paid to the present time.
The work is illustrated by a Map of Cornwall and Devonshire; Geological District Maps, divided into eight sections, in which are shown the boundary lines of each parish, height of hills, sources of rivers, &c.; Maps of the St. Just, St. Ives, Marazion, Helston, Gwinear, Chiverton, Bodmin, Liskeard, Devon Great Consols, Ashburton, and Exmouth mining districts, showing boundary lines of each property, with the lodes, &c., traversing them. It also contains Transverse and Longitudinal Sections of Dolcoath Mine (kindly supplied by Capt. Charles Thomas); Section of the Workings in Botallack Mine (supplied by the manager, S. H. James, Esq.); Geological Map of the Fowey Consols District (supplied by Major Davis, R.M.); Longitudinal Section of Great Wheal Vor, Wheal Metal lode (supplied by George Noakes, Esq.); Historical Account of the Devon Great Consols (supplied by the secretary, A. Allen, Esq.); and of all the principal mines in the two counties.

PATENT VENTILATORS FOR DWELLINGS, at from 1s. 3d. each. The ventilator is made of tin, of small size and most simple construction, graduated, and can be applied to any window in five minutes for 3d. Models of the ventilator are at the Anglo-French Exhibition, Crystal Palace, and the International Exhibition, Dublin. Protected by an explanatory tract entered at Stationers' Hall.—Address, Dr. LOTSKY, the inventor, 18, Melton-street, Euston-square, London.
[Agents wanted.]

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, SEPT. 13, 1865.

COPPER.	£	s.	d.	£	s.	d.
Best selected.....p. ton	89	0	0	—		
Tough cake & tile „	86	0	0	—		
Burra Burra .... „	89	0	0	—		
Copper wire .....p. lb.	0	11½		—		
ditto tubes ..... „	0	12¾		—		
Sheathing & bolts p. ton	91	0	0	—		
Bottoms ..... „	86	0	0	—		
Old (Exchange)..... „	77	0	0	—		
IRON.	Per Ton.					
Bars Welsh, in London..	7	12	6	8	0	0
Ditto, to arrive	7	15	0	—		
Nail rods	8	10	0	—		
„ Stafford. in London	8	10	0	9	15	0
Bars ditto	8	12	6	11	0	0
Hoops ditto	9	15	0	10	10	0
Sheets, single	10	10	0	11	0	0
Pig No. 1, in Wales.....	4	10	0	5	10	0
Refined metal, ditto.....	4	0	0	5	0	0
Bars, common, ditto.....	7	0	0	7	5	0
Do., merch., Tyne or Tees	7	10	0	—		
Ditto, railway, in Wales	7	0	0	7	5	0
Ditto Swed. in London.	11	0	0	11	10	0
To arrive	11	10	0	—		
Pig, No. 1, in Clyde....	2	17	0	3	2	6
Ditto, f.o.b. Tyne or Tees	2	9	6	—		
Ditto, Nos. 3, 4, f.o.b. do.	2	6	6	2	5	6
Railway chairs.....	5	10	0	5	15	0
„ spikes.....	11	0	0	12	0	0
LEAD.						
English Pig, ordny. soft	19	5	0	—		
Ditto (WB)	20	5	0	20	10	0
Ditto sheet	20	0	0	20	5	0
Ditto red lead	22	0	0	23	0	0
Ditto white	26	0	0	27	0	0
Ditto patent shot.....	22	10	0	—		
Spanish	18	10	0	—		

BRASS.	Per lb.
Sheets	8¼d.-8d.
Wire	8¼d.- —
Tubes	8¼d.- —
STEEL.	Per Ton.
Swedish, in kegs (rolled)	13 0 0-14 0 0
„ (hammered).	15 0 0-16 0 0
Ditto in faggots.....	16 0 0-16 10 0
English, Spring	18 0 0-20 0 0
QUICKSILVER (per bottle).	8 0 0 nom.
SPELTER.	Per Ton.
Foreign	21 17 6- —
To arrive	21 17 6- —
ZINC.	
In sheets	28 0 0- —
TIN.	
English, blocks	94 0 0- —
Ditto, Bars (in barrels)..	95 0 0- —
Ditto, Refined	97 0 0- —
Banca	90 0 0-91 0 0
Straits	88 0 0-88 10 0
TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 10 0- 1 11 0
IX Ditto 1st quality „	1 16 0- 1 17 0
IC Ditto 2d quality „	1 7 0- 1 8 0
IX Ditto 2d quality „	1 13 0- 1 14 0
IC Coke ..... „	1 4 0- 1 5 0
IX Ditto..... „	1 10 0- 1 11 0
Canada plates ....p. ton	13 10 0- —
In London; 20s. less at the works.	
Yellow Metal Sheathing....p. lb.	8d.-8¼d.
Sheets.....p. lb.	7¾d.-8¼d.
Indian Charcoal Pigs in London	7 0 0- 7 10 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—The Metal Market, in its struggles to emerge from the obscurity in which it has remained for so long a period, may be expected to show many different phases in its progress, and cannot be expected to exhibit an uninterrupted course of advancement. This state of things has been exemplified during the past week, when the market has not shown quite so favourable an appearance, and the business generally in the metal trade has been again dull and lifeless. Nevertheless, we do not consider there is any necessity for despondency, as we fell assured that before long a much better appearance will become manifest, and we shall find the metal trade moving in its accustomed course of activity and energy. It is most certainly very trying to those engaged in the metal trade for week after week to pass away without bringing this desired improvement; still we must patiently wait until the moment arrives when we can say without any uncertainty that the revival has really commenced. The trade with America continues in an improving condition, and the prospects in the East are rather more encouraging, and continental orders are coming over rather more freely.

COPPER.—This metal still remains firm at present quotations, under which purchases cannot be made; business, however, is very contracted.

IRON.—In Staffordshire orders for finished iron come in steadily, and most of the works are in full operation. Some of the makers are accepting lower rates than those of the association, but the trade is firm, and prospects are tolerably good. The announcement of the determination by Government that the principal railways in India are to have double lines, and that the great Indian Peninsular Railways as far as Jubbulpore will forthwith be constructed in that way, has excited considerable interest. Although Staffordshire does not make rails to any extent, yet the employment of the works in Wales in that branch of production will operate to send orders for other kinds of iron to Staffordshire, and will tend also to strengthen prices. In Welsh, the ironworks are well employed, and a large amount of vitality is evinced in the trade. The continued hot weather has rendered the water short at some establishments, but no serious inconvenience has yet been experienced. The demand for nearly all descriptions of iron is good, and there is no lack of employment for both the skilled and under-hands. There are considerable orders for rails on the books, and bars are also in fair request. Pigs are more enquired for, and prices exhibit more firmness than for several weeks past. Whether an advance will ultimately be realised depends in a great measure on the trade in other districts. The American trade is gradually emerging from the depressed state which has characterised it for so long. The exports for the week ending the 7th inst. reached no less than 6110 tons. In Swedish iron no improvement has taken place. In Scotch pig-iron the market has not been quite so good during the week, and prices have rather declined. Commencing at 57s. cash, the price dropped to 56s. 9d., and then to 56s. 7½d. cash, after which it improved to 56s. 11d. cash, and the last advices from Glasgow report a further improvement to 57s. cash, and 57s. 3d one month.

LEAD.—This metal still continues quiet, but no alteration in prices.

TIN.—The market for Straits is not quite so firm, and transactions are by no means numerous or extensive. It may now be quoted at 88*l.* to 88*l.* 10s., cash. In Holland 300 slabs Banca have been sold at 55 fls.

SPELTER has somewhat improved in price during the week, but is by no means active. Transactions on the spot have occurred at 21*l.* 10s., and more recently at 21*l.* 17s. 6d., which latter may now be quoted as the price for spot parcels.

TIN-PLATES not only maintain their position, but there is a tendency to further improvement. Sales have been larger than usual.

STEEL still continues neglected.

QUICKSILVER can still be bought at the quotation.

BIRMINGHAM, SEPT. 15.—Rylands' "Iron Trade Circular" says—Market tends upwards in pigs, the 2s. 6d. rise established. North Staffordshire makers report good orders for bars, and show indifference to further orders, but no advance on prices of marked manufactured iron must be expected this side of quarter day.

There is a general impression, both in Cornwall and in London, that metals, especially tin, will soon advance in price, and better times will then commence for mines and miners. These are "consummations most devoutly to be wished," and the tone of the MINING SHARE MARKET has already improved; more business has been transacted since our last, both in dividend and progressive mines, than for some weeks past, and prices generally are pretty well sustained. Clifford Amalgamated shares leave off 17½ to 18½; in our article of September 2, writing of these mines, we said—"The 'run' seems to have been of more importance than some persons would have had the public believe at the time; and we understand the accounts at the next meeting will show a large debit balance." These remarks appear to have given rise to a great deal of angry discussion, and to almost unqualified denial in certain quarters; but we need scarcely assure our readers that they would not have appeared in this article had we not known them to be *strictly and literally true;* and to convey such information as we conceived the public had a right to be in possession of. East Basset, 25 to 26; the lode in the 120 west is worth 25*l.* per fathom for copper ore. Carn Camborne, 20s. to 25s.; Cook's Kitchen, 7¾ to 8½; Drake Walls, 10s. to 15s.; East Caradon, 11 to 11½; East Carn Brea, 5¾ to 6; East Lovell, 14½ to 14¾; East Russell, 2¾ to 3; East Wheal Grenville, 2½ to 2¾; Great Laxey, 20 to 21, ex dividend of 10s. per share, and a bonus of 4s.; Great North Laxey, 1½ to 2; Great Wheal Vor, 35 to 36; Herodsfoot, 38 to 39; Hingston Down, 4 to 4½; Lady Bertha, 11s. to 13s.; Marke Valley, 3¾ to 4½; Nangiles, 10 to 12; North Basset, 17s. to 19s.; North Shepherds, 3¾ to 4¼. West Chiverton, 70 to 75; on Williams's lode the 90 east is reported worth 60*l.* per fm.; the 90 west, 100*l.* per fm.; the 80 west, 40*l.* per fm.; the winzes below the 80 are worth, in the aggregate, 130*l.* per fm.; the 70 west, 10*l.* per fm.; the winze below the 70, 30*l.* per fm.; Valpy's lode, in the 90 east, is worth 10*l.* per fm.; the 80 west, 25*l.* per fm.; Burgess's shaft, below the 80, 40*l.* per fm.; the 70 west, 15*l.* per fm. Wheal Chiverton, 8½ to 8½; the lode in Cookney's shaft is improving daily, and the cross-cut from the 60 south is being pushed on with all speed. Wheal Buller shares reached 31½, and leave off 27½ to 30; the 80 west is worth for tin 10*l.* per fm.; the 70 west, 14*l.* per fm.; the 70 east, 16*l.* per fm.; the winze under this level, 16*l.* per fm.; the 60 west, 14*l.* per fm.; the winze under, 10*l.* per fm.; the 80 east, from the 6th (for the fortnight) realised 353*l.* 15s. 3d. Gawton Copper, 30s. to 35s; the lode in the 50 east will produce 5 tons of rich ore per fm. North Roskear, 11 to 12; at the meeting the accounts showed a balance

of 1310*l.* 3s. 5d. against the mine, and a call of 1*l.* per share was made; the prospects of the mine are described as good, but we have not yet received the official report. The ores sold and credited in the accounts are —Copper, 870*l.* 11s. 8d.; tin, 1700*l.* 2s. 11d.; arsenic, 150*l.* Providence Mines, 32 to 34; Rosewarne United, 24s. to 26s.; South Condurrow, 3¾ to 3¾.

Grambler and St. Aubyn, 1¾ to 2; at the meeting the accounts showed a debit balance of 322*l.* 2s. 7d., and a call of 1*l.* per share was made. The mines have gradually improved, and are now about paying half the cost. The engine-shaft is sunk 7 fathoms below the 96, lode 3 feet wide, worth 12*l.* to 15*l.* per fathom for tin. In the 72 end, west of Tregellas shaft, the lode is 3½ feet wide, and letting out a quantity of water, which the agents consider a good indication, as the end is near the junction of the counter lode, where it has been productive in the levels above. South Frances, 16 to 18; Tincroft, 17 to 18; West Caradon, 8 to 9; Wheal Basset, 77½ to 82½; Wheal Crebor, 30s. to 32s. 6d. Wheal Grenville shares have been in good demand at 2¾ to 2¾. Wheal Kitty (Lelant), 8 to 9; Wheal Mary Ann, 4¼ to 5¼; Wheal Rose, 22 to 23; Wheal Seton, 192½ to 197½. Wheal Trelawny, 17 to 18. At the meeting, on Thursday, the accounts showed a profit on the quarter's working of 670*l.* 12s. 6d., and a balance in favour of the company of 1983*l.* 11s. 5d. A dividend of 12s. 6d. per share was declared. Kelly Bray, 5s. to 10s.; the lode in the 30 is worth 15*l.* to 20*l.* per fathom. This run of ore is 10 fathoms in length, and the sampling, 100 tons for two months, will give a profit on the working. At Great Busy the lode at Offord's shaft is worth 45*l.* per fathom, the 100 east is worth 40*l.* to 50*l.* for tin, and the 96 east 25*l.* per fathom. Walker's shaft, sinking below the 90, is worth 50*l.* per fathom; the 70 east, 20*l.* per fathom. Frontino, 3½ to 3¾ prem., and a large business done. North Treskerby, 2¼ to 2½, and in demand. The mine appears to be likely to take a prominent position again ere long. In the 100 about 35 fathoms of ore ground have been gone over, worth 20*l.* to 40*l.* per fathom, and a winze now down 7 fathoms below this level is worth 6 tons of ore per fathom. The 110 has, we understand, gone through 20 fathoms of ore ground, worth 30*l.* to 40*l.* per fathom, and not yet up in the winze. Roseware Consols, ⅝ to ¾.

On the Stock Exchange a moderate amount of business has been transacted in Mining Shares during the week. The following quotations were officially recorded in British Mining Shares:—East Lovell, 13½ to 14½; Clifford, 21, 20, 19½; East Basset, 24½, 25; East Caradon, 11¾, 12; Great Laxey, 22; Hingston Down, 4; Marke Valley, 4.—In Colonial and Foreign Shares the prices were:—Cape, 10¾, 10¾, 11; East del Rey, 1¼, 1¼; Frontino and Bolivia, 3¾, 3¾, 3¾, 4¼, 4, 4¼, 4¼; St. John del Rey, 42½; Mariquita, ¼, ⅜; Washoe (4*l.* paid), 7¾, 7¾, 7¾, 7¾; Fortuna, 2¾.

IRISH MINE SHARE MARKET.—Business in mining shares continues active. The close of last week exhibited a temporary recovery of the Mining Company of Ireland shares, resulting in strongly fluctuating quotations from 18*l.* to 18*l.* 17s. 6d. for cash, and 18*l.* 10s. to 19*l.* for long-deferred deliveries in January and end of February next, thus realising an advance of about 1*l.* per share on the price which we named in our last as the then average market value. This rise was lost, however, on Monday, when the demand for these shares showed a considerable falling off, and continued dull, by which a reduction to 17*l.* was effected for present and January accounts, but for the latter they improved again. Present average value for cash may be said to be about the same as our last quotation—18*l.*, but with sellers predominating. For delivery in January the price is no better, but for the end of February, 18*l.* 10s. is asked, with rather a feebly supported market. Wicklow Coppers have been steady throughout, with only a nominal drop of 2s. 6d. per share on last week's medium price of 14*l.*, at which they are now firmly held. Connorrees have been and continue in considerable request, with a consequent steady rise from 21s. 6d. to 23s. 6d. General Mines continue on offer at 3*l.* Carysforts are much affected, by its being well known that the new board of directors has assumed office with but small funds on hand, and that whatever energy they may put forth in order to do justice to the valuable mining property of the company must involve the necessity of making calls; it being, moreover, considered that the money hitherto spent has done but little towards the effectual development of the mines.

At the Swansea Ticketing, on Tuesday, 1057 tons of copper ore were sold, realising 17,671*l.* 8s. The particulars of the sale were—Average standard, 87*l.* 16s. 3d.; average produce, 15⅞; average price per ton, 11*l.* 14s. 6d.; quantity of fine copper, 239 tons 5 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Aug. 15 ..	1790	£ 90 8 0	14¼	£10 14 0	14s.11d.	£74 12 0
„ 29 ..	1960	91 5 0	12⅝	9 4 0	14 7	72 17 6
Sept. 12 ..	1807	87 16 3	15⅞	11 14 6	14 9	73 17 0

Compared with the last sale, the standard is stationary. Compared with the corresponding sale of last month, there has been a decline in the standard of 15s., and in the price per ton of ore about 2s. 4d. Of the 1507 tons of ore sold on Tuesday, 100 tons were British ores, which gave an average produce of 10¼, and sold at an average standard of 94*l.* 7s. 6d.=7*l.* 13s. 2d. per ton of ore; the remaining 1407 tons were foreign ores, which gave an average produce of 16¼, and sold at an average standard of 87*l.* 14s. 6d.= 12*l.* 7s. 10d. per ton of ore. On Sept. 26 there will be offered for sale 1210 tons, from Cuba, Del Soto, Berehaven, Concordia, and Leghorn.

N.B.—The statement in yesterday's *Times* (given apparently from Messrs. Richardson's Circular) that the standard declined 3*l.* 8s. 6d. is *incorrect*.

The CLAYTON PLATE AND BAR-IRON COMPANY, with a capital of 100,000*l.*, in 5*l.* shares, has been formed for erecting in Manchester a mill for manufacturing steam boiler-plates, and conducting the same on the co-operative principle. All profits above 10 per cent. are to be distributed—one-third to purchasers from the company, one-third to the shareholders, and one-third to the employés of the company, according to their salaries for the preceding year. To enable the company to commence work at once, the promoters have agreed to purchase, at an impartial valuation (without paying anything for goodwill), the Clayton Steel and Ironworks, near Manchester, now carrying on the manufacture of rod and bar-iron, and which works have a good business connection. The proprietors of the said works will take all their purchase-money in shares. Adjoining to those works is land, for the purchase of which the promoters have secured the first offer, at a very low rental. This land will be available for the purposes of the plate-mill, and both businesses combined will assist each other. Coal is plentiful and cheap, there is abundance of water, free, from the canal running through the works, and by which the pig-iron is delivered on the spot, and there is convenience for depositing any quantity of refuse. The "promoters" (first directors) are gentlemen of great influence and position in Manchester, such names as Jacob Bright and Abel Heywood being included in the list.

ALLAN'S OCEAN TELEGRAPH COMPANY, with a capital of 150,000*l.*, will shortly be brought forward. Mr. Thomas Allan's name is already well known to the readers of the *Mining Journal;* and as it is intended to test his improved cable in the first instance between Falmouth and Oporto, before the bolder attempt of crossing to Halifax is made, the chances of failure will be reduced to the minimum. It is stated that one of the advantages of Allan's cable is that it can be laid without much exposure; and it is calculated that, not being saddled with any loss through previous failure, the undertaking should pay as well at a low rate for messages as its rival at a much higher. As soon as the business increases, it is intended to lay another cable between Falmouth and Halifax direct. The present Atlantic Telegraph Company propose to charge 20*l.* for a message of 20 words, whilst Allan's Company will undertake to perform the same service for 4*l.* The short line system, which is represented in Mr. Allan's southern line and in Col. Tal. Shaffner's northern line, possess such evident advantages as, compared with the long sea route, from facilitating both the employment of larger cables and the more rapid transmission of messages, that both are well worthy of being thoroughly tested.

The CHANNEL STEAMSHIP COMPANY has been started in Liverpool, for the purpose of establishing a fleet of screw-steamships for the general carrying trade—foreign and coasting; one of the objects intended being the conveying of coals from the coal fields of South Wales to all parts where the requirements of ocean-going steamers necessitate a supply of this most valuable of all fuels for marine engines. The substitution of screw-steamers for sailing vessels on the coast, for the conveyance of coals to the London market, has proved highly remunerative, making an average profit of 20 per cent. per annum and upwards. To show the superiority of screw-steamers, it may be stated that the screw-collier *James Dixon*, of 87 voyages, and carried 62,842 tons of coal from Newcastle-upon-Tyne and the Tees northward to London, in 12 months, with a crew of 21 hands. To accomplish the same work by sailing vessels would have required 16 ships and 144 hands. The present high price of labour and materials makes this a most favourable time for commencing the business. We understand there will be no promotion money; that the remuneration of officers will be fixed by the shareholders; and that of the managers according to the tonnage. The managers are a well-known Liverpool firm, largely connected with the management of ships, and of more than a quarter of a century's standing. They will hold a large interest in the company, and under their direction and experience the company has every prospect of being most successful. One great advantage this company has is, that there is nothing to be paid for premises, stock, goodwill, debts, or property of any kind, either at valuations or otherwise; the Articles of Association of the Channel Steamship Company leaves it entirely optional with the directors to take over, at cost price, even the two steamers alluded to in the prospectus.

At the Great Laxey Mine meeting, on Wednesday (Mr. G. W. Dumbell in the chair), the accounts (as stated in the Journal of Sept. 2) showed that after payment during the half-year of 13,125*l.* in dividends there is a credit balance of 14,162*l.*, against 10,873*l.* at the end of last half-year. This is further increased by 9439*l.*, balance of the new capital account, making the assets over liabilities 23,601*l.* The value of the ore raised during the half-year was 33,201*l.* A dividend of 10s. and a bonus of 4s. per share was declared. Details in another column.

At the Wheal Trelawny meeting, on Thursday (Mr. Page in the chair), the accounts for the quarter ending June showed a profit of 670*l.* The general balance showed a credit balance of 1983*l.* A dividend of 650*l.* (12s. 6d. per share) was declared, leaving 1333*l.* to be carried forward to the credit of next account. Details elsewhere.

At the Wheal Mary Ann meeting, on Tuesday, the accounts showed a credit balance of 984*l.* 1s. 2d. The agents' report is among the Mining Correspondence.

At North Roskear Mine meeting, on Tuesday, the accounts for June and July showed a debit balance of 1310*l.* 3s. 5d. A call of 1*l.* per share was made. Capts. Vivian, Angove, and Hosking reported that their returns of tin showed a little increase, which they thought they would be able to continue, and if they might calculate on tin regaining its former value, the prospects of the mine in this department, taken together with the improved prospects held out at Pearce's shaft for copper, would enable them to look forward with confidence to again giving dividends.

At Wheal Mary Hutchings meeting, on Wednesday (Captain J. Tom, R.N., in the chair), the accounts showed a credit balance of 43*l.* A call of 4s. per share was made, and the erection of machinery was decided upon. Capt. Edwards's report was considered to be of a highly satisfactory nature.

At Roskearnoweth Mine meeting, on Tuesday, the accounts for June and July showed a debit balance of 4*l.* 18s. 6d. Messrs. Guy, Gill, and Thornton relinquished 33 shares, and it was resolved that in future the mine do consist of 667 shares. A call of 5s. per share was made. Captains Joseph Vivian and Son reported upon the operations at the mine.

At Trelyon Consols Mine meeting, on Sept. 6, the accounts showed a debit balance of 710*l.* 19s. 1d. A call of 10s. per share was made. Capts. James and Pooley say—"Our operations are being carried on by employing 68 men underground. Owing to the stopes falling off in value since the last meeting, we have not raised so much tin as was expected. The returns in future will depend in a great measure on the price for tin. We have large quantities of tin ground laid open (and now idle) that can be taken away at a profit with better price for tin, and as this may be fairly expected before long, we believe the adventurers will be rewarded for their patience."

At East Pool Mine meeting, on Monday, the accounts showed a debit balance of 3496*l.* 17s. 3d. It was proposed by Mr. J. H. Dennis, and seconded by Mr. Joel Blamey, that for the next two months all tinstuff sent from the mine to the stamps be sampled satisfactorily to the three agents; that all the samples be assayed by Capts. Maynard and James, and checked by Capt. Sweet, of Carn Brea Mines; that the doors of the tin-floors be locked at night, and a watcher appointed also from time to time; and that the agents and Capt. Sweet assay the slimes from the river. Mr. West's resignation as engineer to the mine was accepted, and three months' salary allowed him; and Messrs. Michell and Jenkin were appointed at a salary of 1*l.* 11s. 6d. per month.

At Cashwell Lead Mining Company meeting, held at Newcastle-on-Tyne, on Sept. 6 (Mr. William Francis De Mey, M.D., in the chair), the accounts, duly audited, showed a credit balance of 500*l.*; ores not sold, 400*l.*; and, after discharging all liabilities to the end of August, there remained 700*l.* to the credit. This was deemed highly satisfactory, and showed the rapid strides this undertaking had made from a calling to a dividend state.

At the Penhallow Moor Mine meeting, on Sept. 8, the accounts for the seven months ending with costs for July, showed a credit balance of 106*l.* A call of 2*l.* 10s. per share was made.

At Nangiles Mine meeting, on Tuesday, a call of 25s. per share was made. The purser's and clerk's salaries are considered to be high, and it is proposed that their reduction be considered at the next meeting.

At Gwydyr Park Mine meeting, on Wednesday, the accounts showed a cash balance of 15*l.* 13s. 9d., and liabilities in excess 43*l.* 0s. 5d. A call of 6d. per share was made.

At the Garlidna Mine meeting, on Sept. 14, the accounts made up to the end of June showed a debit balance of 3316*l.* A call of 6s. 7d. per share was made.

The Bank of England return for the week ending Wednesday evening showed, as compared with the previous week in the notes issued, a decrease of 1,217,470*l.*; notes in circulation, decrease, 306,675*l.*; public deposits, increase, 335,930*l.*; other deposits, decrease, 347,016*l.*; Government securities in banking department, no change; other securities in banking department, decrease, 121,827*l.*; coin and bullion in both departments, decrease, 166,696*l.*; seven day and other bills, increase, 20,422*l.*; the "rest," increase, 8816*l.*; and in the notes of reserve, increase, 184,935*l.* The total reserve of notes and coin in the banking department was 7,410,519*l.*, against 7,270,540*l.* last week, showing an increase of 139,979*l.* At the meeting of the Bank of England proprietors, on Thursday (Mr. Holland, the Governor, in the chair), the accounts showed the nett profits for the half-year ending Aug. 31 to be 704,269*l.*, which would make the "rest" 3,733,945*l.* A half-yearly dividend of interest and profits of 5 per cent. was declared, without deduction of income tax, after the payment of which the "rest" will stand at 3,006,295*l.* The Governor stated, in reply to questions, that the directors are of opinion that it is not to the interest of the Bank to allow interest on deposits, and that the establishment holds something like 4,000,000*l.* in railway debentures, issued by 15 or 16 lines. The dividend, though smaller than the last, was generally considered to be satisfactory.

The London Bank of Mexico and South America directors have, in accordance with the wish of the shareholders expressed at the last general meeting, convened a half-yearly meeting, for the purpose of submitting a statement of accounts, and declaring an interim dividend. The report, which is highly satisfactory, shows profits at the rate of 20 per cent. on the paid-up capital of the bank. The available total amounts (including 1964*l.* 2s. brought forward) to 24,848*l.* 19s. 1d., out of which it is proposed to declare an interim dividend of 10s. per share, being at the rate of about 9 per cent. per annum, which will absorb 9992*l.*, leaving a balance to be carried forward to the next account of 14,856*l.* 19s. 1d., subject to payment of remuneration to directors and auditors, and income tax. The directors add that latest accounts are equally favourable, and furnish continued evidence that in Mexico, Lima, Callao, and Bogota, where the branches of this bank are established, there is a great field for the profitable employment of large capital in banking operations.

At the Atlantic Telegraph Company meeting, on Thursday, the directors' report stated that the manufacture and submersion of a new cable, and the raising of the old one (the last), will involve the raising of a sum ranging from 250,000*l.* to 500,000*l.*, by the issue of preferential stock bearing a first dividend of 12 per cent., with participation in profits after 8 per cent. has been paid upon the existing shares, and 4 per cent. upon the old capital.

The Grand Trunk Railway Company of Canada are now paying the interest on the Atlantic and St. Lawrence sterling shares and certificates.

The Dublin Trunk Connecting Railway Company board has been further strengthened by the appointment of Mr. Jeremiah Dunne. Messrs. Rigby, the contractors, are steadily and energetically prosecuting the works.

The Millwall Ironworks and Shipbuilding Company directors have declared an interim dividend of 8 per cent. per annum for the half-year ending June 30.

At the Surrey Commercial Dock Company meeting a dividend of 3 per cent. was declared for the six months. The directors were authorised to raise debenture stock not exceeding 140,000*l.*, for paying off the promissory notes of the company, for the extension of its works, and for other purposes.

The Cotton Plantation Company of Natal have received from their plantations about 100 bales of cotton, which will speedily be followed by other shipments of this year's crop.

At Messrs. Pile, Spence, and Co. first ordinary meeting, held at York, the directors reported that, notwithstanding the difficulties which, in the shape of disputes with workmen and contractors, always attend the establishment of a new ironworks, the accounts, after strict investigation by the auditors, exhibit a clear profit of 20,082*l.* 4s. 6d.; and, feeling strongly the necessity of a large reserve for the purpose of meeting the depreciation of the company's property afloat and ashore, they recommend that 10,980*l.* 14s. 1d. should be set apart for this purpose, leaving available for dividend 9101*l.* 10s. 5d., being after the rate of 15 per cent. per annum.

The Tyne Iron Shipbuilding Company have made a call of 2*l.* 10s. per share, payable on October 1.

The Imperial Mexican Railway Company have received very satisfactory advices from Mexico; the gross traffic received on the line between Vera Cruz and Paso del Macho, 47 miles in length, has been—For the month of April, 6994*l.* 10s. 10d.; ditto May, 8481*l.* 2s. 9d.; ditto June, 8412*l.* 7s. 7d.: equal to 39*l.* per mile per week.

With reference to American Securities, Mr. E. F. Satterthwaite reports:—In the London market for American securities we have to record a fair average amount of business. United States Five-Twenty Bonds have been dull and heavy, but without any noteworthy change in price. The chief feature in the market has been the large demand for Erie shares at steadily advancing prices. The buying has been of a very good description, resulting in an improvement on the week of more than ⅝, the closing price being 56¾ to 57. Illinois shares have in some degree sympathised in the rise, as they close 79¼ to 79¾, or nearly 1 above our last quotations.

COAL MARKET. — The fresh arrivals this week only numbered 106 ships. The quantity of household coal continuing insufficient for the requirements of the trade, was all taken off at 6d. per ton advance on last week's quotations. In Hartley's and manufacturers' business has been steady, without alteration in value. Hetton Wallsend, 21s.; South Hetton Wallsend, 21s.; Caradoc Wallsend, 20s.; Eden Main, 19s.; Wharncliffe Wallsend, 19s.; Hetton Lyons Wallsend, 18s. 9d.: 3 ships unsold; 55 ships at sea.

RAISING THE PRICE OF COAL.—At a meeting in Manchester of the coal proprietors of the district, on Wednesday, it was agreed that the prices of coal be advanced, in consequence of an advance of wages having been given to the colliers.

CUTTING COAL BY MACHINERY.—Heretofore, when getting coal or other minerals by means of picks or cutters actuated by machinery, the cutters have been usually carried by trucks running on rails laid on the floor of the mine, along the front of the face of coal upon which the cutters are to be made to operate, and difficulty has been experienced in laying the rails securely, to prevent their shifting when the machine is at work. To improve upon this, Mr. G. Donisthorpe has patented an invention, according to which he employs posts and pillars, wedged or held between the floor or roof of the mine, to hold the rails in position, and prevent them shifting sideways away from the face of the work. The posts may be constructed in various ways to accomplish this object, but he prefers to make them capable of being elongated by means of a screw, and when using them holes are bored in the floor and roof to receive their upper and lower ends. In fixing such posts in holes previously bored to receive them, the lower end of the post would first be stepped into the hole in the floor, and the post then elongated, to cause its upper end to enter the hole in the roof; collars are placed on the posts near their upper and lower ends, and the screw is turned until these collars bear firmly against the floor and roof respectively; by these means the posts will be firmly held; the rails are by preference carried by transverse iron sleepers, having the chairs to receive the rails formed in one piece with them, and a post, such as above described, is placed opposite each sleeper at the end that is furthest from the work. The end of the sleeper is connected to the post at the requisite height from the floor, to bring the rails to the desired level, the post and sleeper being for this purpose suitably constructed to allow of the sleeper being connected to the post at any desired height. The end of the sleeper nearest to the work is packed or blocked up from the floor of the mine, to bring the inner rail to the correct level.

COAL-CUTTING MACHINERY.—The invention of Mr. J. Grafton Jones, of Blaina Ironworks, consists in attaching a heavy roller, the extremities of which are flanged like railway wheels, behind the coal-cutting machine. The roller keeps down the back, and prevents the vibration of the machine.

IRON PYRITES.—Summary of the Production of the (Mundic) Sulphur Ores of the United Kingdom during 1864:—

	Quantity.	Value.
Cornwall	Tons 8,656 7 1	£ 7,434 5 4
Devonshire	1,078 5 1	735 7 5
Cumberland	236 10 0	230 0 0
Durham and Northumberland	7,560 0 0	7,000 0 0
Yorkshire	5,557 18 0	3,079 5 0
Lancashire	2,500 0 0	1,012 10 0
Wales	1,975 2 0	1,264 18 2
Ireland	66,894 0 0	37,320 16 0
Total	Tons 94,458 2 2	£58,097 2 6

SILVER-LEAD ORES.

Mine.	Tons c. q. lbs.	Price per ton.	Purchasers.
Sept. 8—North Devon	40	£10 12 6	Panther Company.
9—Foxdale	100	20 18 0	Walker, Parker, & Co.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Sept. 7	Mary Ann	78	£23 15 6	Stock and Co.
	— ditto	12½	9 10 6	ditto
	— ditto	12½	9 10 6	R. Michell and Son.
11	Frongoch	130	11 12 6	Walker, Parker, & Co.
	—East Darren	80	14 19 6	A. Eyton.
	—Cwm Erfin	25	15 2 6	ditto
	— ditto	45	15 10 6	Panther Co.
14	Talargoch	94½	13 8 6	A. Eyton.
	— ditto	180	13 12 0	Walker, Parker, & Co.
	—Deep Level	10	11 7 6	ditto
	—Rhosesmor	38	11 13 6	ditto
	—Parry's	13	12 0 0	A. Eyton.
	—Bryn Gwiog	20	12 10 0	Walker, Parker, & Co.
	— ditto	20	12 10 0	Newton, Keates, & Co.
	—Pennant	10	11 11 6	ditto
	—Trelogan	30	12 8 0	Walker, Parker, & Co.
	—Pantyne	3	11 15 6	ditto
	—Dog Pit	13	10 18 0	Newton, Keates, & Co.
	—Llangynog United	41	11 7 0	ditto
	—Roman Gravels	35	12 0 0	Walker, Parker, & Co.
	—Cwmbyr	20	10 17 6	Newton, Keates, & Co.
	—Dyfngwm	5½	11 13 6	ditto
	— ditto	5½	11 13 6	Walker, Parker, & Co.
	—Bwlchcoch	9	11 8 6	ditto
	—Llanerchyraur	22	12 0 0	ditto
	— ditto	22	12 0 0	A. Eyton.
	—Penyclyn	15	11 12 0	Newton, Keates, & Co.
	—Caeconroy	3½	13 5 6	ditto
	—South Minera	22	11 15 6	A. Eyton.

BLENDE.

Date.	Mines.	Tons.	Price p. ton.	Purchasers.
Sept. 12	Great Laxey	200	£ 3 17 0	J. H. Attwood's Exrs.
	—North Chiverton	40	3 1 0	Vivian & Sons.
	— ditto	10	1 17 6	ditto

BLACK TIN.

Date.	Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
Sept. 6	St. Ives Wh. Allen	2 19 3 24 ..	£50 0 0 ..	£ 149 18 0	Chyandour.
9	Wh. Trevenna ..	3 3 0 25 ..	49 0 0 ..	154 17 11	—
	—No. Wh. Jane ..	2 2 1 14 ..	— ..	108 1 1	—
	—St. Day United ..	40 19 1 26 ..	— ..	1966 15 1	—
11	Leeds & St. Aubyn	7 3 3 10 ..	54 0 0 ..	388 7 0	Chyandour.

COPPER ORES.

Sold at LIVERPOOL by Mr. James Lewis.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
Sept. 8	West Canada	60	£15 4 6	Newton, Keates, & Co.
	— ditto	60	15 4 6	Bibby and Sons.
	— ditto	60	15 6 6	Newton, Keates, & Co.
	— ditto	30	15 6 6	ditto
	— ditto	30	12 6 6	Bibby and Sons.
	— ditto	60	15 2 6	ditto
	— ditto	60	15 3 0	ditto
	— ditto	65	13 6 6	James Radley.
	— Brynfelin	63	2 18 9	J. Keys & Son.
9	Connorree	86	2 2 0	ditto
10	ditto	99	2 4 0	P. Grenfell and Sons.
11	ditto	6	30 0 0	Newton, Keates, & Co.
12	ditto	5	25 10 6	ditto
13	ditto	5	16 2 6	ditto
14	Cuba	31	51 1 6	Bibby and Sons.

COPPER ORES.

Sampled August 23, and sold at Swansea September 12.

Mines.	Tons.	Produce.	Price.
Cobre	90	11⅝	£8 12 0
ditto	89	12	8 18 0
ditto	88	11⅞	8 15 0
ditto	37	19¼	14 8 0
ditto	86	11⅞	8 13 6
ditto	66	11¾	8 14 6
ditto	38	18⅞	14 7 6
ditto	84	12	8 17 6
ditto	31	38	27 3 0
ditto	30	36¾	26 15 6
ditto	15	47¾	35 5 0
ditto	13	48¾	35 5 0
ditto	1	25	18 12 0
Sundries	24	12⅝	9 16 0
Cuba	116	14	10 2 0
Cuba	114	14 ..	£10 0 6
ditto	15	65¼	46 4 0
ditto	113	14¼	9 17 6
ditto	100	13⅞	9 16 6
ditto	12	65¼	45 17 6
ditto	90	13¾	9 17 6
ditto	51	21⅝	16 4 0
ditto	6	65¼	45 7 6
ditto	6	68	47 7 6
Mixed Ore ..	1	22⅝	16 0 6
Berehaven ..	99	10⅝	7 11 6
Victor Emanuel	21	4¼	3 0 0
ditto	11	8⅞	6 3 6
Sardinian Ore.	60	10⅞	7 19 6

TOTAL PRODUCE.

Cobre	702	£8368	5 0	Berehaven	99	£ 749 18 6
Cuba	624	7927	15 6	Victor Emanuel ..	32	130 18 6
Mixed ore	1	16	0 6	Sardinian Ore	60	478 10 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Freeman and Co.	143	£1616 18 3
Grenfell and Sons	331	3813 11 0
Sims, Willyams, and Co.	121	2782 5 6
Vivian and Sons	224	3073 5 6
Williams, Foster, and Co.	314	2882 18 9
Bankart and Son	24	1107 0 0
Penclawdd Copper Company	330	2823 9 0
Total	1507	£17,671 8 0

Copper ores for sale at Swansea, Sept. 26.—Cuba 136, 114, 12, 110, 99, 95, 93, 90, 3—Del Soto 82, 79—Berehaven 76, 70, 70, 64—Concordia 5, 1, 1—Leghorn 5, 2, 1—Regulus 2—Total, 1210 tons.

TOTAL AND AVERAGES.

	21 cwts.	Produce.	Price.	Standard.
British	100	10¼	£ 7 13 2	£ 94 7 6
Foreign	1407	16¼	12 7 10	87 14 6
Whole sale	1507	15⅞	£11 14 6	£ 87 16 3

TOTAL AND AVERAGES OF LAST SALE.

	21 cwts.	Produce.	Price.	Standard.
British	825	10⅛	£ 7 5 2	£ 94 0 0
Foreign	1135	14⅜	10 12 4	89 17 0
Whole sale	1960	12⅝	£ 9 4 0	£ 91 5 0

COPPER ORES.

NO SALE on Thursday last, Sept. 14.

Copper ores for sale at the Royal Hotel, Truro, on Thursday next—Mines and parcels.—Devon Great Consols 2025—New Wheal Martha 568—Hingston Down 483—Marke Valley 427—East Caradon 425—Wheal Friendship 209—Bedford United 141—Wheal Emma 139—Okel Tor 131—East Wheal Russell 103—Lady Bertha 61—Fursdon 41—Wheal Edward 34—East Phœnix 31.—Total, 4818 tons.

Copper ores for sale at the Royal Hotel, Truro, on Thursday week—Mines and parcels.—South Caradon 536—Clifford Amalgamated 443—Great Wheal Busy 407—Wheal Rose 363—North Treskerby 335—Phœnix Mines 319—West Caradon 192—Fowey Consols 165—Gonamena 122—St. Day United 104—Wheal Prudence 74—Wheal Kitty 22—Boscawen 13—Wheal Lovell 3—Minasota 2.—Total, 2160 tons.

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

VISIT OF JAPANESE TO THE COPPER MINES AT ALDERLEY EDGE.—In accordance with an invitation given some time back, by Mr. E. C. Procter, of Macclesfield, the Chairman of the Alderley Copper Mining Company, to Mr. Ryle Holme and the Japanese gentlemen under his care, a numerous party assembled on Saturday last to view these extensive works. During the time occupied in lighting up the subterranean galleries and caves, which were illuminated for the occasion, the Japanese guests made a minute inspection of the works above ground. A move was then made towards the incline leading to the mouth of the mine. The company were gratified to learn that Lady Stanley, the Hon. Miss Stanley, with other members of the family, had signified their pleasure to witness the illuminations of the inner works and galleries, and her ladyship led the way, followed by the guests of the Chairman, and a strong muster of the fair sex, and other residents of Alderley and Chorley. Suddenly they emerged into a large vault, whose dimensions the light from hundreds of candles failed to reveal. This was, however, from time to time accomplished by the mining men, who were perched aloft with supplies of magnesium wire, which, being burned, lit up the cavity and its ramifications with surpassing effect and brilliancy. From this point the works seemed to take a sudden dip downwards; still the path was never impracticable, and walking was continued with pleasing facility for, perhaps, a quarter of a mile further down, leading to a still larger cavity, lit up with innumerable candles and impromptu chandeliers. This is evidently that part of the mine now being vigorously worked. The spacious cavern was repeatedly and brilliantly illuminated with blue lights, magnesium wire, and yellow, pink, and white fires; and at this, the culminating point of interest, the Japanese guests could be seen gliding with great alacrity into the different subsidiary galleries from which the copper stone is daily extracted in large quantities. The pleasing interest of the company present was here kept up for fully a quarter of an hour, every minute of which was filled up with a variety of illuminating effects, eliciting exclamations of gratification.

MINING IN IRELAND.—Everyone who has travelled much among Irish mines is loud in praise of their capabilities. Considering the immense amount of mineral wealth already discovered, and how cheaply much of it is to be procured, it seems passing belief how idly it has been allowed to remain. The Holyford Mine, the only one in the district now working, is situate ¼ mile east of the mining village of Holyford, and 7 miles west of the Dundrum Station, on the Great Southern and Western Railway. The only lode opened and worked is, strange to say, a north and south one, and the only known one with that bearing (20° west of true north) which has been so largely productive of copper ores. The mine was started by the former company in 1846, during which year the ores procured from surface operations realised 1558*l.*, and in 1847, the second year of its existence, over 16,000*l.* worth was sold—sufficient to purchase an engine and machinery for the complete development of the mine. At Holyford North Mine an engine-shaft has been sunk on a lode bearing 15° north of east, to a depth of 30 fathoms, in the same highly mineralised ground as before described. This company's capital became exhausted, and the mine was stopped. On this cross lode, as it is here termed, ancient workings may be traced for a mile in length. At Glenough, is Ballycohen Lode, parallel to Holyford Lode. But little has been done here, although a splendid lode has been partially opened. Several other lodes on the adjoining properties have been worked slightly, all showing a capital gossan. Seeing the numerous and well-defined lodes and cross lodes, with the beautiful gossan which they contain near the surface, and the congenial and productive character of the strata in which they are embeded, one is compelled to adopt the belief that the Holyford district only awaits the advent of capital to become the centre of a rich, populous, and thriving mining field. It has before been mentioned that the Holyford lode was largely productive in a north and south direction; deposits having such a bearing occur in other copper districts only as exceptional and rare cases, and then only in connection with rich east and west lodes. Oola Mines are situated eight miles south-west of Holyford, and three from Limerick Junction. Oola Station, to which there is a good road, is only distant a quarter of a mile from the West Oola Mine, at which are the principal workings. Here has been placed a good engine, with crusher and winding gear, and necessary mine buildings; in fact, the mine is very neatly and well laid out, and, on the whole, the money already spent, amounting to about 9000*l.*, has been well applied. There is a group of five lodes, traversing the property in a direction nearly east and west, and these dip slightly north.

STEAM ON COMMON ROADS.—A curious little handbook, which can be conveniently carried in the waistcoat pocket, has just been issued through Messrs. Spon, of Bucklersbury, by Mr. THOMAS AVELING; it is entitled, "Road Locomotives: An Epitome of the New Road Locomotive Acts, for the use of Owners and Drivers." The suggestion that all horses that shy at a steam-blast should be prohibited from entering a public highway, in preference to keeping steam-engines out of it is, no doubt, excusable from a manufacturer of road locomotives, but that such a doctrine should be seriously advocated by others was scarcely to be expected. There are many purposes, however, for which road locomotives are very useful, and since their speed is limited to four miles per hour, and a man must walk in front of them with a red flag to give notice of their approach, whilst neither smoke nor steam must be suffered to escape, there cannot be any objection to their use. The book will be of great utility to owners and drivers, since they can ascertain any legal point that may arise with the utmost facility.

TREATING COAL, PEAT, &C., FOR THEIR PRODUCTS.—According to the patent of Mr. John Cassell, the raw products are placed in retorts heated in any ordinary manner, and currents of vapour highly charged with electricity, generated in a Beauregard's apparatus, are passed through the material. He then condenses these products by ordinary means, and obtains oils and other volatile products, while the residium in the retorts is gathered in the shape of charcoal, coke, and heavy hydro-carbons.

A NEW INVENTION.—Mr. Fry, of Quay-street, Bristol, has now on view at his house the model of railway carriages, designed for the purpose of saving passengers the risks and annoyance of travelling with bad company in such carriages as are now in use. This plan is very simple and appears very perfect—in fact, a desirable improvement. The carriages are all connected by bridges, fastened on like the buffers, so as to recede in case of pressure, and there is a passage through the centre of all the carriages, so that the guard can pass with perfect safety from the last carriage to the engine-driver. The carriages now in use can be modelled on this plan with very little cost. The only objection is that the passage would occupy about a sixth of each carriage; seven carriages instead of six would be required. The additional cost would be very little compared with the perfect order and safety secured by the new design. Mr. Fry also proposes a "lock-up" carriage next the guard's van, into which any person guilty of misconduct may be removed. The invention possesses great merit, and it is to be hoped that some of our great railway companies will send their engineers to see the model.

PRICES OF MATERIALS,

As charged at TRELTON CONSOLS MINES during the following mines:—

		April.		May.		June.	
Borer cast steel	per cwt.	45s.	0d.	—		—	
White lead	"	—		24s.	0d.	—	
Norway timber	per foot	0	8	—		—	
Yellow pine ditto	"	1	3	—		—	
M. C. coals	per ton	11	8	11	6	11	4
Best candles (delivered free)	per doz.	5	3	5	3	—	
1st P. Y. C. tallow (ditto)	per cwt.	—		45	6	—	
Rape oil (ditto)	per gal.	4	6	4	6	—	
Powder (ditto)	per 100 lbs.	40	0	40	0	—	
Safety-fuse (ditto)	per coil	0	4	—		0	4
Pick hills	per doz.	1	9	—		—	

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

GLAMORGAN IRON AND COAL COMPANY.—My present purpose will be served by your allowing me to remind those who applied for shares in this undertaking that, in reply to my enquiry in the Journal of July 29, Messrs. Moore, Delatorre, and Co., of King-street, Cheapside, in the Journal of Aug. 12, distinctly stated that every share had been *bona fide* subscribed for, and paid upon by some 150 members; and that on enquiry at the Stock Exchange it would be found that the shares were readily saleable at 3 prem. Now, I should like to ask those gentlemen, if that statement was true, upon what grounds the Stock Exchange Committee could, after mature deliberation, arrive at a determination to refuse a settlement, in consequence of there being "many objectionable practices in the promotion of the company, and in the allotment of shares?" What does the writer on this subject, who signed "Critic," in the Journal of Aug. 5, say to this? I now, in return, refer the gentlemen concerned to the Stock Exchange for information, rather than reiterate the various rumours I have heard from there. But as this matter has now assumed a very serious aspect, I think Messrs. Moore, Delatorre, and Co. may be fairly called upon for some explanation—What are the objectionable practices in the promotion of the company, and in the allotment of the shares, complained of? But, of more consequence still, what course do they now propose to adopt, so far as we shareholders are concerned?—SHAREHOLDER: *Manchester.*

IODINE.—Can any reader inform me Dr. Hofman's address, the discoverer of iodine, or the address of anyone that understands the obtaining that new product from ores carrying a good percentage of the same?—F. N.

COPPER MINES OF NORTH AMERICA AND CANADA.—Any gentleman now in England, who is well acquainted with these mines, and their method of working, will greatly oblige by forwarding his address to "J. B.," *Mining Journal* office, Fleet-street, London, when an interview will be appointed.

JOINT-STOCK COMPANIES LAW.—Will you kindly reply to the following query in next week's Journal? Can a limited liability company compel a person (who has paid a deposit for shares in their scheme and received an allotment paper, but not paid for the latter) to pay the allotment and all subsequent calls?—Z. A.—[The power of the company to compel an applicant to accept the allotment would depend upon circumstances. The "form of application" usually contains an undertaking to accept the shares allotted, but there are cases in which he would not be legally required to carry out his contract. Thus, an instance has recently occurred of a company commencing business with 5000*l.* instead of 500,000*l.* subscribed, and in such cases the Courts of Law would certainly decide in favour of the applicant. If the applicant withdraw he must forfeit the deposit paid, and it may be taken as a general rule that if the company be a *bond fide* one the letters of allotment, if not paid upon, will be cancelled, and the shares re-allotted; if this course be not adopted by the company, the applicant had better consult his solicitor, and ascertain whether there are fair grounds for withdrawing. Such enquiries as these should always be accompanied by the Articles of Association, prospectus, and list of shareholders, under Sec. 32 of the Companies Act, 1862, together with any special particulars relative to the company, as general answers are at all times unsatisfactory. The documents will be returned if stamps be enclosed to pay postage.]

PRODUCE OF BRITISH SILVER ORES.—Will some one of the many scientific readers of the Journal be kind enough to state, for the information of those interested in mining, whether the mineral raised from any of the mines in Great Britain has yet produced 400 ozs. of silver to the ton avoirdupois.—T. M. N.: *Dublin, Sept.* 14.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, SEPTEMBER 16, 1865.

A case of the utmost importance in connection with the Mine Inspection Act has just been heard at the Wellington (Salop) Police Court, and the decision given is one which we hope will not be generally followed, since it certainly appears to offer a premium for neglect, and is calculated to interfere materially with the efficiency of the Act. An information was laid by Mr. THOMAS WYNNE, the Government Inspector for the district, against his own son—Mr. RICHARD HORTON WYNNE, the manager of the Old Park Colliery—the cause of complaint being that the defendant had omitted to give notice to the Inspector of the death of a man, which resulted from an accident which occurred in the colliery three days before. The defence was that notice of the *accident* had been given, as required by the nineteenth section of the Act, and that that having been done, the Inspector was not entitled to require notice of the *death* which afterwards resulted from it. The magistrates, curiously enough, decided not only that the defence entitled the defendant to a verdict, but even refused to condemn him to pay the costs incurred in connection with the information.

Now, the Act appears to be opposed to such a decision in an unusually clear manner; and we think that, after reading the clause, few colliery managers would have been bold enough to adopt the line of defence chosen by Mr. RICHARD HORTON WYNNE; and that, even admitting the habitual lack of legal knowledge amongst country magistrates, but very few courts could be found in which such a defence would have led to a similar result. The Act of Parliament provides that—

> If and when loss of life or any personal injury to any person employed in or about any coal mine, colliery, or ironstone mine, occurs by reason of any explosion, and if and when loss of life or serious personal injury to any person so employed occurs by reason of any other accident whatever within such coal mine, colliery, or ironstone mine, or any pits or shafts thereof, or any works or machinery connected with such pits or shafts, the owner or agent of such coal mine, colliery, or ironstone mine shall, within 24 hours next after such accident, send notice of such accident, and the loss of life or personal injury occasioned thereby, under the hand of such owner or agent, in England to one of Her Majesty's principal Secretaries of State, in Scotland to the Lord Advocate, and in all cases to the Inspector of the district within which such accident shall occur, and shall specify in such notice the probable cause of such accident, and such notice may be sent through the post-office, by letter addressed to such Secretary of State or Lord Advocate, and to the Inspector of the district at his usual place of residence; and every owner or agent who neglects to send or cause to be sent such notice as aforesaid within the time aforesaid, shall for such offence be liable to a penalty not exceeding 20*l.*

That it is not distinctly stated that a second notice shall be given where the accident does not result in death within 24 hours we admit, but we maintain that the provision is that notice shall be given both of personal injury and of loss of life; for, inasmuch as the owner or agent is required to send notice of the loss of life occasioned by the accident, we think that a notice describing a given accident as resulting in "serious personal injury" only, would not be a true return of an accident from which "loss of life" ensued, and that, therefore, the owner or agent is bound, to protect himself from the penalty to which he is otherwise liable, to correct his false return immediately upon finding that it is false. As the course taken by Mr. RICHARD HORTON WYNNE would render it almost impossible to obtain a true return of the deaths from colliery accidents, which the Government Inspectors are required to supply, we trust immediate steps will be taken to show that the requirements of an Act of Parliament cannot be neglected with impunity.

A NEW SOURCE OF COAL SUPPTY FOR MEDITERRANEAN STEAM SHIPPING.—Despatches of considerable interest and importance to the steam shipping and coal trades have been received in Liverpool, intimating that a very extensive bed of coal has been discovered at the foot of Mount Olympus, thirty miles from Salonica. It would appear that the Viceroy of Egypt having received a hint that coal was to be found in the vicinity of Mount Olympus, secured possession of that wild district, and immediately commenced operations for the striking of the stratum. These operations were successful, and the result is that after reserving for the steam company, Azizie, of Alexandria, full supplies to the extent of its requirements, the Viceroy purposes throwing open to all nations the delivery of the fuel, which can be furnished at the rate of 10 francs per British ton, a figure immensely below the present cost of coal in any depôt along or around the Mediterranean seaboard. The importance of this discovery cannot be too highly estimated, for not only will it effect an immense saving in the working of the steamers of the various companies trading to Alexandria and the eastern ports of the Mediterranean, but it is not improbable that depôts may be formed to meet the requirements of the Red Sea traffic, because coal can be shipped from Olympus and stored at Suez at a cheaper rate than coal drawn from other resources of supply. The only obstacle which at present presents itself is the probable anger of the immortal gods at having their favourite resort turned into a colliery, but this is little likely to disturb the infidels who have projected the desecration, and whose immediate object is worldly gain.

OUR IRON EXPORTS.—It is only when we cast a retrospective glance at the last 10 or 15 years that we realise the enormous development of British commerce during that period. Thus, the total value of the iron and steel exported from the United Kingdom in 1850 was 5,350,056*l.*; in 1851, 5,830,370*l.*; in 1852, 6,684,276*l.*; in 1853, 10,845,422*l.*; in 1854, 11,674,675*l.*; in 1855, 9,465,642*l.*; in 1856, 12,966,109*l.*; in 1857, 13,603,337*l.*; in 1858, 11,197,072*l.*; in 1859, 12,314,437*l.*; in 1860, 12,154,997*l.*; in 1861, 10,326,646*l.*; in 1862, 11,365,150*l.*; in 1863, 13,150,936*l.*; and in 1864, 13,214,294*l.* Comparing 1864 with 1850, we have thus an increase of 7,864,238*l.*, or 146·91 per cent. Every description of iron has contributed to this progress, with the exception of old iron for re-manufacture. Thus, the value of the pig and puddled iron exported in 1850 was 348,074*l.*, while it was 1,411,513*l.* in 1864; the value of the bar, angle, bolt, and rod iron, and of the railway iron of all descriptions, rose from 2,801,043*l.* in 1850, to 5,819,790*l.* in 1864; the value of the wire exported, from 86,573*l.* in 1850, to 396,757*l.* in 1864; of the cast-iron, from 215,332*l.* in 1850, to 656,085*l.* in 1864; of the hoops, sheets, boiler-plates, and wrought-iron of all sorts, from 1,454,010*l.* in 1850, to 4,017,206*l.* in 1864; and of the unwrought steel, from 393,748*l.* in 1850, to 881,502*l.* in 1864. The value of the old iron for re-manufacture, exported in 1850, was 50,876*l.*, but it had declined to 31,253*l.* in 1864.

COPPER SMOKE—No. I.

For many years, and almost for centuries, England commanded the copper trade of the world, and she obtained this supremacy from the fact that she possessed not only the richest mines in the then known world, but also because she had the fuel required to extract the metal from its mineralised condition. Now, when copper smelting became one of the great trades of England, it was found cheaper to carry the copper ore to the fuel, when the deposits of the latter were within moderate distance of, and easily accessible from the mines by water, rather than to take the fuel to the copper. And it was this which led the smelters to the locality of Swansea for their works, situated, as it is, on the borders of one of the largest of England's coal fields, close to the sea shore, and within a few hours' sail from Cornwall, where are situated the mines which for centuries supplied the world with copper.

The introduction in any neighbourhood of great manufactures, in which large quantities of fuel are consumed, must more or less injure the air of the locality and destroy the neighbouring vegetation; and this injury will, of course, be much augmented when there issues from the manufacturing chimneys not only smoke, the simple product of the combustion of the fuel, but also a great quantity of poisonous gas. Unfortunately in copper smelting a vast amount of poisonous gases are given off, for the great proportion of the copper ore of the world is found in nature combined with sulphur, which has to be separated before the metal can be extracted, and which passes off in the form of gas. The amount of this sulphurous acid gas from the works at Swansea has been estimated by the French chemist Le Play to be 65,900 cubic metres annually. It is not, then, a matter of astonishment that the inhabitants of Swansea have continually harped on the question of compelling the copper smelters to consume the smoke from their smelting-works, as it has affected the health of the neighbourhood, and destroyed the vegetation around the works. The most persevering movers in this smoke question years ago attempted to get a bill into Parliament to oblige the smelters to do something in the matter, but it was felt a difficult thing to do anything effectual without hampering an important branch of the metal trade; and the smelters, on their part, strennously opposed any legislation on the subject, greatly on account of the large capital required to test the feasibility of the plans proposed, although the chemists and metallurgists of the day attempted to prove to them, that by collecting the most objectionable and abundant of the gases they would, after the first outlay, greatly increase the profits of their smelting-works, by the simple conversion of this gas into merchantable sulphuric acid. The matter thus lay dormant until the other day, when, curiously enough, one of the copper smelters themselves proclaimed aloud that he was going to free Swansea from smoke, by using a particular form of furnace which would enable him to collect the obnoxious gas. Confident of the success of this furnace, and believing that it is likely to be the only efficacious one for the purpose, he purchased the patent for this furnace from its discoverer, and has since been inducing the landowners to drive the other smelters to refrain from any longer poisoning the neighbourhood, and to come and buy of him the privilege of using his patent. So far, in fact, has he gone in this matter, that the other smelters have been threatened with the strong arm of the law unless they do as he says. It will, then, be a matter of some interest to see what this plan is, and how far it is capable of effecting the desired end, and, at the same time, it will be well to compare it with other patents previously taken out for the selfsame purpose, and which may be as efficacious as this almost untried one, for they have never been thoroughly examined or appreciated by the public; and it will be also well to mention what Dr. Percy says on this subject, not only in his "Treatise on Copper Smelting," but, also, in his annual course of lectures at the Royal School of Mines, in which he has reiterated his belief that the copper smelters of England must one day be the great sulphuric acid manufacturers of the country. The plan, or rather patent furnace, of which Mr. Vivian, the copper-smelter mentioned above, lauds so highly, is that of a German; and we find from the Patent Office that M. Gerstenhöfer has patented in England what he terms a furnace for roasting pyrites, the object of the particular construction of which is "to effect in an economical manner the roasting of crushed pyrites, for the purpose of driving off the combined sulphur therefrom, prior to its conversion into sulphuric acid." The furnace consists of a rectangular chamber, filled with rows of bars, having one of their faces parallel with the top of the furnace, and so arranged that no two bars in succeeding rows shall be directly over one another. The ore is introduced from above, in a finely divided state, and the supply is regulated by rotating feed-rollers fixed in the roof of the furnace. These feed-rollers are placed over the first row of bars, and as the ore falls through it piles up on them, until it at last flows over and falls then on the row of bars below, and the supply being thus kept evenly flowing from above, gradually fills the whole furnace. Between the feed-rolls and the bars are channels in the side of the furnace, by which the products of the calcination may escape; and besides these, there are other apertures which may be opened as necessity requires for cleaning the bars, as also other minor arrangements which do not interest in this explanation. Below the tiers of bars—and here it may be mentioned that the higher the furnace the more perfect will be the calcination—there is an open space into which, at the commencement of the calcination, a grate with some ignited fuel (say) wood or charcoal, is introduced, and this fire is well fed with fuel, until the charge is thoroughly ignited, when the grate is withdrawn, and the charge burns by means of the ignition of the sulphur evolved. This combustion is kept up by a current of air forced from beneath up through the furnace, and the products of combustion are thus carried over through the set of channels in the top of the furnace, away into the sulphuric acid chambers. The channels by which the gases are here conducted are so arranged as to heat the current of cold air forced into the bottom of the furnace. The calcined ore having passed through the furnace, falls into a space below, from which it can be drawn off into wagons, and so transferred to the next operation.

The principal advantages gained by the use of this invention, says M. Gerstenhöfer, are the following:—"First, the ores are operated upon in a very divided state, so as to expose a large surface to the action of the air, and this surface is always being renewed; second, the air which must be admitted is forced to come perfectly into contact with the ores; third, the ores are brought into the furnace by mechanical means, continuously and in such quantities as may be required, so as to maintain a continual roasting process; fourth, the air or draft is also brought into the furnace by mechanical means, in order to be able to regulate the draft, according to the quantities of ore, and also to prevent the influence of storms, which are sometimes very troublesome in working with grate furnaces; fifth, the heat produced by the ores is not led away uselessly by the gases, but is employed to heat the new ores and the air."

Now, in the first of these advantages, the inventor says the ore must be in a very divided state, in fact, from the principle on which the furnace is constructed, this must be an essential of success, for it is much to be doubted whether any grains so large as peas would be calcined but just on their surface; it must, then, strike every practical smelter that one objection to the process is, that all his ores must be ground or crushed fine, and this is no small undertaking, when it is remembered that much of the ore, as now calcined, is in pieces as large as beans. That a fresh surface is continually being exposed to the action of the heat is a decided advantage, as, of course, no rabbling is required. But this advantage involves also a great disadvantage, and that is the necessity for a blast apparatus, the current from which must be carefully regulated. The third recommendation—that the supply of ore must be regulated by mechanical means, involves constant attention to the machinery so used. The blast-machinery being once in action, the fourth advantage mentioned by the inventor must be at once admitted; and the last is, without doubt, a simple mechanical arrangement of decided good. It will not, however, do to dismiss this patent, and proceed to consider the many others which have been taken out for the same purpose, without mentioning that Mr. Vivian has not yet given the world any notion of the expense of this mode of calcining; and in the absence of such, it must strike the most obtuse that the amount of work the above furnace can accomplish will be less, by more than half, what an ordinary calciner will do. And it certainly would have been very satisfactory if we had been told whether this furnace has been found to answer

for all the varieties of copper ores smelted at Swansea, since it is much to be doubted whether all the ores there calcined will burn without the assistance of some fuel.

COAL-CUTTING BY MACHINERY.

In a highly interesting paper read before the Institution of Mechanical Engineers, by Mr. THOMAS LEVICK, of the Blaina Ironworks, it was remarked that many attempts have been made during a century past to construct coal-cutting machines. One of the earliest was that of Michael Menzies, in 1761, consisting of a pick fixed on the axle of a pulley placed near the face of the coal, to which a reciprocating motion was given by means of a chain passing round the pulley, and connected with a steam-engine at the surface, the pick performing the operation of kirving or holing; he also invented a pick-machine to be worked by hand. In 1830 a battering ram for coal mines was proposed by William Wood. This was a heavy ram fixed in a sliding-box acting on a wedge, the ram being worked backwards and forwards by manual labour. The next to be noticed is a plan in 1843, consisting in applying rotary saws or picks driven by a winch or an engine for the purpose of severing blocks of coal from the surrounding mass. This was one of the first attempts for using rotary cutters, and the arrangements were complicated. In 1846 a plan was proposed by Mr. W. H. Bell for suspending a heavy pick or chisel by a chain from a bar running along the face of the work at the roof, so as to be swung by hand against the coal. In 1852 a machine was applied by Mr. W. D. Hedley, similar in its action to a planing-machine, having a cutting tool projecting from the side of a carriage running on a railway, and the tool was made to cut deeper and deeper into the face of the coal by repeatedly traversing the carriage, and setting the tool at each successive cut to project more and more beyond the side of the carriage. There were holes in the machine at different heights for altering the tool according to the different heights at which the coal has to be cut. About the same time a plan was proposed by Mr. C. H. Waring, in which reciprocating or revolving cutters are worked by compressed air or steam. The reciprocating cutters have somewhat the motion of planing or slotting-machines, but the rotary cutters are fixed in the circumference of a wheel, and act like a circular saw. The machine is arranged to cut either vertically or horizontally. The apparatus for applying the power is mounted on the frame of the machine, and consists of an oscillating cylinder, worked by compressed air or steam. In 1861 a pick-machine to be worked by hand was proposed by Messrs. Ridley and Rothery, the pick working horizontally and vertically, and both motions being upon fixed axes; and about the same time a hand-machine was proposed by Mr. Donisthorpe, in which the tool was a bar mounted on grooved rollers, giving it a rapid motion forwards and backwards. These are some of the principal attempts up to that time to work coal by machinery. They may be divided into reciprocating picks, sliding or planing picks, and rotary saws or cutters; none of them, however, have continued in practical use. The principal practical difficulty in the application of machinery to coal cutting is the confined space it is required to work in. Most of the machines above referred to occupy too much space, and are generally too complicated for application in a coal mine; and machines made to be worked by hand, on account of the friction of the mechanism and the cumbrous arrangement, absorb too much manual labour to give them much or any advantage over the pick worked by the skilled collier. It was not until within the last two or three years that anything practically useful has been accomplished in the application of machinery to coal cutting; and Messrs. Donisthorpe, Firth, and Ridley's machine, working at the West Ardsley Colliery, near Leeds, was the first machine which may be safely said to have demonstrated the practicability of cutting coal by machinery. This was one of the class of machines working with a pick, which was driven by a cylinder worked by compressed air; and it was followed by another machine, which introduced a trunk arrangement of the driving cylinder, so as to shorten up the connecting rod, thereby considerably shortening the machine, and enabling it readily to traverse the quick curves of mine tramroads, thus removing a serious practical difficulty previously experienced. Both these machines have been successful in performing one operation in coal cutting, namely "holing" or undercutting a seam of coal horizontally, and on a true plane, or nearly so. But as they were constructed only to cut a groove horizontally, or rather parallel to the plane of the tramway, they were not adapted to meet the cases of inclined seams, so frequently occurring in practice; and as they were also limited to the horizontal undercutting, all vertical cutting that was required in the operation of getting the coal had to be done by hand work. These machines were inapplicable to driving headings; and for that purpose a modification of them has been made, having two pairs of vertical picks, one pair on each side of the machine, and each pair consisting of one pick, working upwards vertically from the bottom, and the other working downwards vertically from the top, so as to make the two cuts meet one another. The undercutting, however, in driving the headings was still required to be done by the hand of the colliers. The remaining portion of the paper was devoted to the description of the machine invented by himself and Mr. Jones, the details of which were published in last week's Journal.

In the course of the discussion which followed the reading of the paper the Chairman (Mr. Robert Napier) remarked that the application of machinery to coal-cutting was a subject of great importance, and there could be no doubt that ultimately coal-cutting machines would greatly assist manual labour, by performing the most difficult and dangerous work of undercutting the coal. In the machine described in the paper just read, the principal feature appeared to be the arrangement by which the tool was turned round to work at any inclination, thus affording the means of cutting the coal at any angle. The machine was otherwise similar to that of Messrs. Donisthorpe, Firth, and Ridley, which was now working at the West Ardsley Colliery, near Leeds, and he believed that was the first instance in which machinery had been successfully brought into practical operation for coal-cutting by the use of compressed air actuating a pick; the machine was capable of being worked in any part of the mine by compressed air supplied to it from an engine at the surface. Mr. Sampson Lloyd enquired what effect the great variety in the thickness of the seams of coal in different districts would have upon the applicability of the machine now described; and whether, if successfully employed in one district with a certain thickness of the seams, the same machine could be made equally appliable in another where the seams were of a very different thickness? Mr. C. Cockrane thought one of the difficulties attendant upon different thickness of seam would be felt in applying the coal-cutting machine in South Staffordshire, owing to the different method employed in cutting the thick coal. In undergoing the thick coal the practice was to cut away a thickness of 2½ feet, and this was all sacrificed as slack, and had to be excavated in order to allow the collier to go in under the coal for performing the holing, which was carried to a depth of 10 or even 20 yards in from the face. Before adopting the machine, information was needed respecting its durability as to whether that had been tested by actual working, and also in reference to the total outlay for plant in cutting coal by a machine of the size alluded to in the paper. Mr. F. Levick explained that the machine excavated only 2 or 3 inches thickness of coal in undercutting the coal to a distance of 3 feet in; and the coal so undercut could then be benched down for a height of 2½ feet, if desired; after which the machine could go under and proceed with the holing 3 ft. further in, and so on to any extent of undergoing that might be desired, since the machine was made low enough to enter into any space 2½ feet high, and thus go under the coal wherever a collier could work in the ordinary system of holing. Mr. C. Cochrane thought the machine was best applicable for undercutting thin seams of coal, where the creeping of the roof had the effect of breaking down the coal as the work proceeded. In applying this machine, however, to the lower portion of the thick coal there would be no such creeper, the thickness of coal above being so great as to prevent any practical deflection; and thus the difficulty would arise as to how the coal so undercut could be broken down; and furthermore how, if that were effected, the large masses of coal could be conveniently broken up into pieces sufficiently small for a man to lift. One advantage of the deep excavation made by a collier in holing the thick coal, notwithstanding the quantity of slack produced, was that the act of dropping the seam above broke the coal up into masses, which did not require much further trouble to make them small enough to be handled in the usual way. Mr. F. Levick explained that, by turning the pick round so as to work vertically, the machine would cut the coal vertically in the same manner as it performed the holing. It was not intended, however, for breaking up the large masses of coal after they were benched down, and that operation, as well as loading the coal into trams, would have to be done by hand labour, as at present. Mr. F. Smith observed that it appeared from the explanations which had been given that the machine was as applicable as manual labour to the purpose of undercutting coal to the extent of even 9½ ft. thickness, by excavating two horizontal cuts at top and bottom of that thickness, and then benching down the coal between; and the difference between the two modes of holing was the important practical advantage obtained with the machine in getting nearly that thickness of coal in the useful form of lump coal, instead of its being all converted into slack as was done by the collier. In reply to a question, Mr. F. Levick stated that there were only two of the machines yet at work in the present form, but a number more were in progress; and there were as many as 20 or 30 holing machines in use upon the previous construction, before the improvement of the rotating headstock had been added, for enabling the pick to work at all inclinations. No one who had once tried the machine had discarded it, and all who had already got it at work intended to employ it more extensively.

REPORT FROM SCOTLAND.

GLASGOW, SEPT. 13.—The shipment of PIG-IRON from the Scotch ports for the week ending Sept. 11 are again large—16,289 tons, against 9713 tons last year; total since Jan. 1 till date 485,757 tons—increase, 27,123 tons. A most extensive business has been done in the market since this day week at from 56s. 9d. to 57s. 4d. cash, 57s. to 57s. 6d. a month, and 57s. 6d. to 58s. three months. To-day the market was scarcely so good, 56s. 4½d. and 56s. 9d. cash, and 57s. 6d. three months having been accepted. For shipping iron the prices are—No. 1, g.m.b., 56s. 9d.; No. 3, 56s.; No. 1 Gartsherrie, 63s.; No. 1 Coltness, 65s. 6d.; No. 1 Calder, 58s.; No. 1 Langham, 58s. The MANUFACTURED IRON market is firmer, and prices for BARS are tending upwards. There are some very good specifications in this market, and some of the makers refuse to sell unless at an advance of 2s. 6d. per ton. The works are fully employed, and in many instance are behind with delivery. SHIPBUILDING IRON is quiet, but steady, and prices are nominally the same. Quotations can hardly be given generally different from last week. The foundries on all hands continue fully employed, and pipes especially in great demand.

COALS continue in demand for shipment, and the exports are large, although not equal to the same week last year. The figures are—This year, 26,330; last year, 32,500 tons. Yesterday meetings of miners took place in various parts of Scotland, when resolutions were unanimously passed for *demanding* an advance of 6d. per day on their wages. This "demand" by the colliers will undoubtedly be followed by a similar "demand" on the part of the ironstone miners; and as men are scarce, and many of the hands who had employed themselves at the ironstone pits during the summer months are offering themselves to the coalmasters who are short of hands, a simultaneous rise will have to be immediately conceded to both classes of workers—in fact, it was stated that some of the masters had already signified their intention of granting the rise.

The important case of Mr. M'Donald, Secretary to the Miners' Association, *versus* Snowdowne, colliery owner, Tillicoulty, has been decided by Sheriff Taitt's dismissal of M'Donald's appeal. The particulars in this case, your readers are aware, were reported in a former Journal. The sheriff, in a note, states that the appeal was incompetent—that M'Donald had no title to prosecute—and that the Government Inspector was the party to whom complaint should be made in case of inadequate ventilation or other dangerous state of a mine or colliery. Should the Inspector neglect his duty, information should be lodged with the Secretary of State, who could remove him at once.

A new railway bridge across the Forth, at South Alloa, is in contemplation by the Caledonian Railway Company. This contemplated line will give that company a direct route to the North, and as it is intended to run *via* the ports of Queensferry, Bo'ness, and Grangemouth, to the ferry opposite South Alloa, it will enable them to compete very successfully for the large mineral and goods traffic between these places and Glasgow. The project of bridging the Forth at the point named was mooted half a century ago, and so recently as 1845 a company was projected, with a capital of 100,000*l.*, for attempting the enterprise. In those days of railway delirium the project was scouted as ultra-utopian, and now, in more sedate moments, the scheme for bridging this arm of the sea is being progressed with as if it were a matter of ordinary occurrence. If the Caledonian Railway Company will it, it will be done, and there is nothing to prevent this line from being remunerative to the shareholders.

At the Caledonian Railway half-yearly meeting, yesterday, the affairs of the company were shown to be in a most flourishing condition, and the dividends noted in my last report were declared. It was stated that the great competing line—the North British—had resolved to relinquish all aggressive measures for a season, and that both companies would thus be enabled to devote their undivided attention to the improvement of their different lines.

A new pier is about to be erected at the beautiful watering-place of Dunoon, on the Clyde. Whether the structure is to be of wood or iron, or a combination of both—which would be the most enduring—the plans are not sufficiently matured yet to say. Were the principle of cast-iron piles, filled with concrete, to be adopted, bound together by transverse cast-iron couplings, and faced and flanked with timber, the result would, perhaps, be the construction of a pier of the best possible materials for resisting the storms and tides incidental to that part of the Frith where it is to be situated. Cast-iron, used in the manner indicated, has been known to be more economical than timber, even in parts where the latter could be had abundantly for a trifle, comparatively.

REPORT FROM NORTHUMBERLAND AND DURHAM.

SEPT. 14.—The Coal and other trades here continue satisfactory. The demand for coal and coke of all kinds is good, and although the price obtained is not very high, yet it is more remunerative than it was some time ago. The Cramlington Strike still continues, and, if we are to judge from the sentiments expressed at a meeting held near the works, there appears to be no prospect of its termination. If we are to take the speakers at this meeting as a fair sample of the intelligence of the Northumberland-men, the prospect is also gloomy enough, as they do not express any breadth of view, or a single large idea; indeed, quite the reverse. When the great strike took place, more than 30 years ago, one of the leading men, the late justly-celebrated Mr. Thomas Hebburn, may be said to have possessed considerably more sense and discretion than any of the Cramlington orators; and if he had been living he would have been a great acquisition at that meeting. But we do not believe that the men of Northumberland were represented at the Cramlington meeting—that is, we do not believe the intelligence of the men was represented. The number present is stated to have been 3000 men. The first speaker was Mr. Nixon, the President of the Northumberland Miners' Mutual Confident Association. He stated that the number of men hewing steam coal in that county is about 4000, and the average produce of each man 4 tons per day (this, taking the lowest price quoted at the meeting for getting coal, gives 5s. 4d. per day), or 16,000 tons of coal per day. He recommends the men to reduce the get to 3 tons per day; this would make the daily output 12,000 tons per day, and this, he says, would speedily bring the masters to their senses, and put an end to the strike. But how this is to produce the effect desired he does not explain. It might, however, perhaps be asked, would this step not simply have the effect of sending the consumer to another market for the odd 4000 tons? It is really nonsense to talk in this style at the present day, and if the men are to be led by such blind guides the prospect is, as we said before, gloomy. From other speeches we gather that the only offer of a compromise made by the Coal Trade Committee is that the men should accept the Seaton Delaval prices, with the mode of working at the same place. The Cramlington men, in the first instance, demanded an advance of prices, which was not conceded. Two gentlemen were appointed by the committee to examine and report upon the work in the said pits, and their report stated that the prices paid were *as high* as, and in some instances *above*, those paid at the other steam coal collieries. It will be seen at once that the committee had, upon this report, no other course open, for an advance at this particular pit would ultimately lead to a general advance—that is, taking the report to fairly represent the case, which there is no reason to doubt. But the offer made of the Delaval prices afforded a basis for a settlement, which ought not to have been thrown away, for it compromises the dignity of none of the parties, and the basis is surely broad enough, for the colliery referred to is one of the largest in the world, and the best prices paid. Now, the only objection made to this by Mr. Robinson, at the meeting on Monday, is merely one of detail, and we venture to say a total misunderstanding between the parties; for the committee distinctly offer the Seaton Delaval prices, with the mode of working there, and, therefore, Mr. Robinson's objection can easily be arranged. He says—"The scale at Seaton Delaval Colliery will not suite Cramlington. The Delaval prices are 1s. 6d. per ton, where the coal is 5 ft. 1 in. in height, and upwards. From 5 ft. 1 in. down to 4 ft. 8 in. the price is 1s. 7d. per ton, and below 4 ft. 8 in. 1s. 7½d. per ton." But at present there is no coal worked at Delaval below 4 ft. 8 in., while at Cramlington the coal is worked down to 4 ft. Well, surely the basis of an agreement is there, and this little affair might be easily adjusted. The usual scale of increase in price in the district as the thickness as the seam decreases is well known, and we repeat that the men ought to accept the Seaton Delaval prices. If they do not, the struggle may continue much longer. But some of the speakers dwell much on the hardness of the coal in the Alabama way, and for all purposes we think that the old system of arbitration would be found most satisfactory to all parties. In former times, when disputes arose, the men made choice of a viewer, and the master another, and each viewer employed men to work an average day's work, so as to settle the prices to be paid, and their decisions generally were satisfactory.

At the meeting of miners on Monday, Mr. Gammage, of Sunderland, made a speech, which was not reported at length, and this is to be regretted, as it contained some practical hints of great value. He, however, thinks that a remedy will be found for such strikes in co-operation. Without going so far as this, we consider that the scheme is well worth a trial. The pitmen of the Tyne and Wear have already established many prosperous societies, but these are at present confined to building, benefit, and provision shops, &c. Why not raise sufficient capital to purchase and work a colliery? this might easily be managed, and the result turned to profit in many ways. They would not only have a chance of getting a profitable return for their money, but they would gain knowledge as to the profit derived from such speculations, and also as to the risks and dangers attending them; at any rate, we think that the advantage to be derived in this way would be very great, as at best the ideas of the great body of the men on these subjects are very confused, and often erroneous, and if they once became coalowners as well as coal workers, their self-respect and self-reliance will be greatly increased.

In its application the principle of limited liability would really appear to be limitless. Several other local undertakings are about to be enrolled under the auspices of this increasingly popular Act. One of these involves an amalgamation of the extensive establishments of Messrs. T. Richardson and Sons, of the Hartlepool Ironworks, Messrs. Richardson and Duck, the eminent iron shipbuilders of the Tees, and Messrs. Denton, Gray, and Co., iron shipbuilders, Hartlepool, the triune company bearing the title of "Richardson, Denton, Duck, and Company (Limited)." The capital will be 500,000*l.*, in 10,000 shares of 50*l.* each. Another contemplated undertaking in the same direction is the transfer to a joint-stock company of the large works of Mr. W. Barningham, at Darlington and Pendleton. The former consists of the well-known Albert Hill Ironworks, in the heart of the Cleveland iron district and Durham coal field, while the ironworks at Pendleton occupy the tongue of land that divides the Lancashire and Yorkshire Railway from the Manchester, Bury, and Bolton Canal, thus presenting excellent facilities both of inlet and outlet, and affording an abundant supply of coal; the capital of this company has been fixed at 750,000*l.*, in 37,500 shares of 20*l.* each. The directorate list in each case is highly respectable. The chemical works which belonged to Messrs. Swinburne and Co., at South Shields, and which have been closed some two or three years, have come into the possession of a limited liability company ("the St. Bede's), who are rebuilding the furnaces, putting up a large chimney, and getting them into working condition again.

THE HARTLEY RELIEF FUND.—The half-yearly account of the distribution of this fund has been published, the period extending from Feb. 28 to Aug. 31. The expenditure during that time has amounted to 2169*l.* 3s. 3d., the principal item being 1781*l.* 3s., for allowance to widows, orphans, and others for relief; 80*l.* as marriage portions; and 126*l.* 8s. 10d. for education being also included in the outlay. There remains a balance to the credit of the fund of 54,634*l.* 9s. 5d.

DISSATISFACTION AMONGST THE IRON WORKERS AT MIDDLESBRO'.—For the last day or two a rumour has been circulated that the iron workers at Messrs. Fox, Head, and Co., Newport, were likely to "turn out," in consequence of the masters wishing the men to use a harder kind of stone in "fettling" the furnace. The men declare that the masters would gain no advantage by adopting the plan they propose, and that it would entail more labour on the employed. As the men have no disposition to create a long strike, probably an amicable settlement may be come to. There are 27 mill-furnaces at Messrs. Fox and Head's Works.—*Newcastle Daily Chronicle.*

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

SEPT. 14.—For the last two or three months a steady improvement in the demand for manufactured Iron has been noticed in this letter. At first the reality, and still more the permanence, of that improvement were called in question, but it is now agreed on all hands that the trade is in a state of satisfactory activity. There is no overwhelming crush of orders; there are branches in which orders are rather short; but, on the whole, the trade is in a prosperous state. Pig-iron is firmer in price, and buyers are paying more than they did at the beginning of the quarter by from 1s. 3d. to 2s. 6d. per ton. The Hardware Trades are also more active. There is a good home demand, and the foreign orders are, on the whole, larger than they were. Staffordshire, in both its great manufacturing districts, and in all branches of its staple trades—including the earthenware manufacture, and especially the shoe trade of Stafford, which is very brisk—is in a state of steady, and, it may be hoped, sound prosperity.

In North Staffordshire a Strike at the collieries of Mr. Williamson, at Tunstall, continues, but some men are working at the mines, though about 400 of the regular hands are idle. The object of the strike is an advance of wages, and the policy is clearly to obtain it in one instance, and then to pursue the same tactics with other proprietors. The masters assert their determination in the strongest manner to resist the attempt, as one which has no real foundation in justice.

In South Staffordshire a Conference has taken place between delegates from the puddlers in and around Wolverhampton and a number of iron-masters there, the object of the men being to come to some understanding on the subject of wages which shall preclude the necessity of future strikes or lock-outs. The question was raised by the Wolverhampton puddlers at the close of the late lock-out, and its discussion has been adjourned from various circumstances; but, probably, mainly because neither party saw its way very clearly to an improvement in the present system of regulating wages. That plan is based on the principle suggested by the late Mr. G. B. Thorneycroft, a good many years ago, of adjusting puddlers' wages, and with them all other wages of ironworkers, by a sliding scale, to run parallel with the price of manufactured iron, as fixed by the Iron-masters' Association. Formerly the standard was the price of bars, the puddlers receiving per ton in shillings what the ironmaster received per ton in pounds for his iron. Gradually the men, however, have gained 1s. per ton above that ratio, but the sliding scale is still maintained; and, in accordance with it, three advances of 1s. per ton each were made about two years ago, and one reduction followed about a year ago, against which the resistance which led to the lock-out was directed. The puddlers who sued their masters appear to desire to adopt a fixed price for puddlers' wages, independent of the fluctuations in the price of iron, and they wish that price to be 10s. per ton, or 6d. above the present rate. It is, however, thought they would consent to the present rate of wages if the masters would agree that, in case of a reduction in the price of iron, they should not be reduced. The masters, however, adhere to the sliding scale principle, with the proviso that wages are not to go below 8s., nor to rise above 10s. 6d. per ton. Both parties are tolerably contented with things as they are, and there does not appear any ground to fear an immediate difficulty, especially as the aspect of trade rather points to an advance than a reduction in the price of iron. The great difficulty in any such negociation is that the masters being a few known men are pledged to their side of the bargain, whilst the men, being a numerous body, and not much dealt with as individuals in such matters, are by no means so amenable to the force of public opinion in keeping an agreement which a certain number of their body may make with their employers.

An inquest was held on Monday, at Kidsgrove, as to the death of a miner named Philip Clarke, who died from injuries caused by an explosion of gas in the Clough Hall Colliery. The evidence strikingly shows the primitive mode of conducting operations in which human life is at stake. It was well known that gas accumulated in the workings, and the remedy was to brush it out with one of the men's jackets prior to the miners beginning work, and occasionally during the day. The deceased was performing this operation when the explosion took place. It was found that in the pocket of the jacket with which he was brushing away the gas there was a fusee, which had lighted, no doubt, by the friction of rubbing against the face of the coal, and so caused the explosion.

The papers and discussions at the meeting of the British Association at Birmingham, on questions closely related to the special province of the *Mining Journal*, have been so numerous, that reference must be limited to a single point—that of the probability of the supply of coal from the South Staffordshire and adjacent fields being considerably extended beyond the boundaries which at present limit the area within which that mineral is raised. Mr. Samuel Bailey, mining engineer, of Walsall, in a paper on the Economic Resources of the Coal and Ironstone Measures of the South Staffordshire Coal Field, showed in a favourable manner how greatly the available sources of supply have been worked up, and whilst Cannock Chase remains almost virgin, though being now rapidly developed, yet that the supply is greatly less than when the great 10-yard

seams remained intact over large areas. As previously indicated, Mr. Henry Johnson, of Dudley, and Mr. H. Beckett, of Wolverhampton, are sanguine as to the existence, at a practicable depth, of commercially valuable seams under the great tract of country in which the coal measures are overlaid by the Permian rocks, and explorations and actual workings at West Bromwich have shown that there is truth in this doctrine, and in several places borings are going on with a view to further discoveries at other points on the confines of the present recognised coal measures.

This most important and interesting subject—certainly by far the most important practical geological question which this country affords—was discussed with great ability on Friday evening, in a lecture delivered in the Town Hall, Birmingham, by Mr. J. Beete Jukes, M.A., F.R.S., F.G.S., and who is at the head of the Geological Survey of Ireland. Mr. Jukes is a native of Birmingham; he has made the geology of South Staffordshire his special study, has written upon it, and is regarded as a very high, if not the highest, authority in reference to this district. The lecture was addressed to persons ignorant of geology, and was largely devoted to rendering clear the leading conclusions of geologists as to the deposition of the carboniferous limestone, which underlies the coal measures, and its absence under a large tract, containing the Shropshire, Staffordshire, and Warwickshire coal fields, owing to the elevation of the land of that district above the sea level during the deposition of the carboniferous limestone, which is composed almost entirely of the remains of marine animals, &c., and which could not, therefore, be deposited on land elevated above the sea level. The coal measures came next in order, and above them the Permian rocks, and the question was, what grounds were there for concluding that underneath these Permian strata there would be found measures of coal of sufficient thickness to pay for working, and at what depth would such measures of coal be reached? Mr. Jukes is far less sanguine than many who have considered the question. He believes that coal measures do exist beneath these Permian rocks, but in some cases that the whole, in others the principal, measures may have been removed by erosion prior to the laying down of the Permian rocks, in which cases the result of explorations would be disappointment. He concludes that, in case of any borings being prosecuted in the hope of reaching the coal measures underneath the Permian rocks, those who undertake them must be prepared to go down to a depth of 1000 yards, when they may expect to find the coal measures; but they may find that these measures have in that case been swept away prior to the Permian rocks being deposited, and that these latter rest on another and a lower formation, or that the coal measures remaining are practically valueless. He regards the problem, however, as one of great importance and of national interest, and, whilst it is possible that experiments may be made by a combination of owners of property, yet he thinks the task is one of such great extent, and the result of such great national interest, that he thought it should be conducted at the national cost, with due provision that in case of a successful result those benefiting by it should repay the expenses incurred. The lecturer received warm compliments from the President and Lord Stanley, and was loudly applauded by the audience. In a discussion which followed the reading of a paper by Mr. H. Johnson, of Dudley, on the same subject, Sir Roderick Murchison expressed himself as decidedly favouring the expectation that workable beds of coal, of greater thickness even than those which have been worked, may be found under the Permian rocks in the wide tract which surrounds the South Staffordshire and Shropshire coal fields.

At the Walsall Police Court, Mr. W. F. Fryer, was charged by Mr. J. P. Baker, the Government Inspector of Mines, under seven different summonses with having permitted the following infringements of the Mines Inspection Acts in certain collieries belonging to him at Bloxwich—That on June 6, in two instances, he neglected to provide proper fencing for his pits when work was suspended; that on the same day, in three instances, he neglected to provide distinct and definite signals from the bottom of his pit shafts to the surface and from the surface to the bottom, and also from the engine to the said pits; that on the same day he did not provide proper means of signalling between the engineer and the banksman or hooker-on at a pit which was 50 yards distant from the engine; and that he failed to provide adequate break power to an engine used for conveying persons up and down certain pit shafts. In answer to the several charges, Mr. Morson, nephew to Mr. Fryer, pleaded guilty in each instance. He imputed the infringements complained of to the negligence of certain persons in Mr. Fryer's employment. Mr. Bolton, of Wolverhampton, who appeared for the prosecution, said he did not wish it to be inferred that Mr. Fryer himself had any direct knowledge of the infringements. At the same time he might state that Mr. Baker, in his capacity of Mine Inspector, never prosecuted without affording ample time for remedying the evils he complained of. For the first offence Mr. Fryer was fined 5*l.*, and in each of the other cases a fine of 1*l.* was inflicted.

At the Wellington Police Court, James Mantle, the mining inspector of some pits at Clee Hill, was summoned by Mr. Wynne, the Government Inspector of Mines, for omitting to comply with the requirements of the Act regulating mines, inasmuch as he did not give notice to the Inspector within 24 hours of a fatal accident that occurred at one of the pits under his care. Mr. Marston, solicitor, Ludlow, who represented Mantle, said the omission arose entirely through inadvertance. Fined 1*l.*, and 9*s.* costs.—Mr. John Bennett, of Wombridge Colliery, was summoned by Mr. Wynne for a similar offence. Mr. H. Bennett said the accident was the first that had occurred there since he undertook the management of the colliery. Immediatedly after it took place he gave notice to the Secretary of State, but was not aware that the Inspector required notice as well. Fined 2*l.*, and 9*s.* costs.—Mr. Richard Wynne, manager of Old Park Colliery, and son of the Inspector, was summoned by his father for omitting to give notice to him of the death of a man resulting from an accident which occurred in the colliery three days before. Notice of the accident had been given within the prescribed time. The Bench dismissed the summons on the ground that no further notice of an accident or death was necessary after the notice required to be given within 24 hours after such acciden or death had been given. Costs were refused.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE

SEPT. 14.—A steady and continued improvement may be noted in connection with the Iron Trade, both for home and export. The markets are well attended, and orders are given out more freely of late, so much so that no doubt is now entertained of an active winter trade being done. At Sheffield there is considerable activity prevailing in the export of tools for the Southern States of America, and now that the war is over it would seem that the Northerners are busy cultivating the peaceful arts of trade and commerce. There are more orders than usual in the market for railway iron for continental lines, partly for renewals and partly for extension lines. Boiler-plates, too, are in great request, and makers find it difficult to keep pace with orders coming in. The Pig-Iron Trade is improving, and full quotations are being realised; the tendency of the market being still upwards.

From all I can hear, the applications to Parliament during the next session will be far more numerous as regards railway schemes than for many years past, several of the existing railway companies being unusually busy in promoting extensions of their lines. The contract for the construction of the new straight line to Liverpool by the Manchester, Sheffield, and Lincolnshire Company has been let to the eminent firm of Messrs. T. Brassey and Co., and the works are to be commenced immediately, and carried on with unusual vigour. The new line between Sheffield and Chesterfield is being pushed forward with great activity. The making of the tunnel near Norton is going on satisfactorily, and other parts of the line will be let as soon as possible.

Though the weather is remarkably hot for the season, the demand for all descriptions of coal continues active. The coal proprietors are contemplating raising the price of coal, in consequence of the advance of wages given to the colliers. The recent working agreement with the Great Eastern Company is now showing itself by the enormous quantities of coal which are being carried on that line from the South Yorkshire district. The Great Eastern will shortly commence running on the Great Northern loop line, from Retford to Peterborough, which will open a further traffic for coal from the South Yorkshire district. It was intended the arrangement should commence on Oct. 1, but I am informed the preliminaries are not sufficiently settled for that. The completion of the Doncaster and Gainsbro' line will give the Great Eastern direct access to the South Yorkshire coal field. The hard coal, both in Derbyshire and Yorkshire, is in very great demand, particularly for the export trade, and its utility for locomotive and marine engine purposes is now more fully appreciated. A large increase has taken place of late in the export traffic in hard coal from the ports of Hull and Grimsby. In the early part of the season stocks at most of the collieries had accumulated to a great extent, but now they have rapidly diminished, whilst the collieries are working full time. There is an undoubted prospect of a very good winter trade. There is a briskness in the coke trade, and the demand is now almost greater than the production can satisfy, especially for the better qualities.

A number of gentlemen who are interested in the elevation of the working classes have commenced a company, called "The Clayton Forge Company," for the manufacture of boiler-plates and of bar-iron, on the principle of dividing profits with the workmen and the customers. The scheme, shortly described, is as follows:—All profits up to 10 per cent. will belong to the shareholders; all above 10 per cent., after providing for repairs and renewals of plant, is to be divided into three equal portions, the first of which will belong to the shareholders, the second to the workmen, and the third to the customers. The subdivisions amongst the workmen are to be in accordance with the wages earned by each, and the subdivisions amongst the customers according to the purchases made by each. Thus the scheme says to the shareholders, "We hope to pay you something more than 10 per cent. for your investment;" to the workmen it says, "You shall no longer have reason to complain that your employers get an undue share of the profits, for if they earn more than 10 per cent. you shall share it;" and to the customers it says, "Our best exertions shall be at your service, and you shall not pay too much for your iron, for if we earn more than 10 per cent. you shall have a share of the excess as extra discount." We believe that Messrs. Briggs, the colliery proprietors of Normanton, have already tried the division of profits amongst the workman with good effect, and there is every reason to believe that the principle will spread not only in that, but in other employments. The division amongst customers is a new idea, and is, of course, intended to secure orders in all states of trade, and we hope and believe will be found to answer the purpose.

An appalling accident occurred at one of the pits of the Kirkless Hall Coal and Iron Company, by the breaking of a steel rope, by which the lives of eight men and boys were sacrificed. The cause of the accident is not satisfactorily explained. The rope, which was a steel one, slipped off the groove and snapped like a piece of glass, and the poor fellows were precipitated to the bottom, and killed on the spot. The occurrence of this accident would suggest the adoption in every mine of one of the patented apparatus for the prevention of accident by the breaking of ropes. We believe such apparatus would be adopted more extensively were they generally recommended by the Government Inspectors. These gentlemen, or rather some of them, believe their adoption would induce in the engineman a greater amount of neglect than under the present system, as he could feel there would be less liability to accident.

The position of the Derbyshire lead mines remains unchanged since our last, but it is a very remarkable fact that not one is quoted in the share-list at par. The shares of the Mill Dam, upon which two dividends of 5*s.* have been paid—the latter dividend on the 5th inst., stands at from 7*s.* 6*d.* to 10*s.* discount. The mine itself is reported as likely to pay a dividend of 5*s.* per share per quarter. The local stock and share markets have improved, and some railway stocks have risen considerably, especially North British. Gas and water shares are in demand, but there are none in the market.

A further indication of the unsettled condition of the colliers just now is afforded by the strike at the Thrybergh Hall Colliery, near Rotherham. The men are dissatisfied with the size of the corves used in the pit, and would also seem to question the accuracy of the weighing-machine. On these grounds nearly 300 of them have given up their employment, and they refuse to return to it "until their complaints receive the attention they deserve."

REPORT FROM MONMOUTH AND SOUTH WALES.

SEPT. 14.—The weather has been so oppressively hot during the week that the men at the ironworks have not turned out the usual quantity of iron, and fairs and other enjoyments have also attracted many of them away. There is no lack of employment at any of the works; on the contrary, the managers in many instances complain that the irregularities of the hands cause serious inconvenience. Large orders for rails are in hand, and one of the iron companies has just secured an order for 5000 tons on Russian account. There is a steady, firm enquiry for pigs, and buyers show but little hesitation in purchasing at full rates. Other descriptions of iron remain without any change to report, either as regards demand or value. In tin-plates a brisk business continues to be transacted, and the exports from Liverpool are reported to be largely increasing. Since the termination of the American war charcoals, which had been so long a drug in the market, have commanded a gradually improving sale, and prices are now maintained with tolerable firmness. The home requirements are not quite so large as was expected a few weeks ago, owing, perhaps, to the effect of the rather unfavourable harvest on the trade of the country, and the stagnation in the money market. There is an average enquiry for steam coal, and the export merchants are doing a fair trade. In house coal the shipments coastwise are considerable, buyers having commenced to prepare for winter, and the movement in the home trade referred to last week is maintained.

Mr. James Morrison, the agent for the Glamorgan Coal Company, Cardiff, wishes it stated that their "company is not connected in any way with the Glamorgan Iron and Coal Company. The Glamorgan Iron and Coal Company has only recently been formed, whereas our company has been in existence for some time, with registered offices in Edinburgh. Our secretary had already taken steps to change the designation of the Iron and Coal Company."

The Tredegar Works are reported once more to have been sold, the purchaser being, it is said, Mr. D. Gooch, M.P. for Cricklade, and formerly locomotive superintendent on the Great Western. The report is not generally credited, although it is well known that some of the partners are disposed to sell, provided a good price can be obtained.

New wagon works are about to be opened on the east side of the river at Newport, by Mr. James Murphy, just at the point of junction of the Great Western and Pontypool, Caerleon and Newport Railways. The works are to be on an extensive scale, and will have communication with both the broad and narrow guage lines.

EMPLOYMENT OF BOYS IN COLLIERIES.—At the Merthyr Police Court, on Monday, Mr. Moody, the manager of the Cyfarthfa Collieries, was summoned by Mr. T. E. Wales, Government Inspector of the district, for permitting a boy, named Thomas Lewis, under 12 years of age, to be employed in the Cethin Colliery, contrary to the provisions of the Act of Parliament. Mr. Simons appeared in support of the summons, and referred to the inefficiency of the present Act of Parliament for the prevention of such offences. The boy was killed by an accident on July 21, and it was proved that he was only nine years of age. A letter was read from Mr. Crawshay to Mr. Wales, stating that the cause of the boy being employed was owing to the misrepresentation of his age given on a certificate by his father. The latter, who was present, denied that the signature to the certificate was his, and the mother said she believed a school-fellow wrote the signature. Mr. Fowler, the stipendiary magistrate, stated that, under the circumstances, he should not fine Mr. Moodle, but would simply order him to pay the costs. Mr. Simons applied for a summons against the parents, which was granted. There is too much reason to fear that a great many cases of this nature continually occur.

TRADE OF THE SOUTH WALES PORTS.—The following are the returns for the month of August:—

Exports of Coal.	Aug., 1865.	Aug., 1864.
Cardiff	Tons 126,108	Tons 136,268
Newport	22,072	28,463
Swansea	43,883	51,041
Llanelly	8,498	13,729
Shipments Coastwise.	**Aug., 1865.**	**Aug., 1864.**
Cardiff	Tons 76,390	Tons 74,067
Newport	56,174	56,133
Swansea	24,544	27,918
Llanelly	24,459	20,008

Cardiff also exported 19,396 tons of iron and 4979 tons of patent fuel, Newport 10,773 tons of iron, and Swansea 231 tons of iron and 3384 tons of patent fuel: 2650 tons of iron were cleared from Cardiff for Alexandria, 2384 tons for Stockholm and Cronstadt, and 1950 tons for New York. Of the iron exported from Newport, Cronstadt took no less than 3701 tons, Dordt 1321 tons, and New York 1016 tons. The decrease in the coal exports was caused is a great measure by unfavourable weather and the irregular supply from the collieries, and the demand was also slightly below what it was at the corresponding period of last year. The iron returns show that a large trade was done with Russia and Sweden, and the shipments to New York indicate that the American demand is improving.

[The remarks in our South Wales letter of last week with reference to the prosecution by the Royal Society for the Prevention of Cruelty to Animals (and which were forwarded by a Correspondent) have caused a great deal of comment amongst the local colliery viewers—the general opinion being that it was simply by an unfortunate chance that the colliery with which Mr. Bedlington is connected should have been selected for the first prosecution. Mr. Bedlington occupies a high position in South Wales, and is one of the most active members of the South Wales Institute of Engineers; and the remarks objected to must be taken *to* apply to the system alone, as we feel assured there was not the slightest intention of attacking Mr. Bedlington personally.]

THE ROYAL CORNWALL POLYTECHNIC SOCIETY.

The care and deliberation required in awarding prizes and giving decisions concerning the various artistic and mechanical productions exhibited at the Royal Cornwall Polytechnic Society's late Exhibition at Falmouth have necessitated some delay in the issue of the list of awards. We have at length an officially revised list of the decisions, and also the judges' reports on the special objects commended to their attention, which have not hitherto been published.

GALE'S METHOD OF PROTECTING GUNPOWDER.—The judges highly approve of Mr. Gale's method of Protecting Gunpowder, and consider that if any means could be adopted to avoid so great an increase of bulk it would become of great national importance, and an invention that would unquestionably effect a great saving of life and property. The mixing and sifting is effected so easily that the judges consider it would not materially operate against its general use. They award it the first bronze medal.

PRENTICE'S GUN COTTON.—With reference to Prentice's Gun Cotton, the judges think it right to mention that the experiments were tried under a disadvantage, from the fact that the holes were all of too great a diameter for the specimen charges brought by the agent. The experiments were, however, considered satisfactory, and the power of the cotton was thought to be quite equal to that of ordinary powder; and as it possesses also the advantage of being almost smokeless, the judges consider it deserving of a high testimonial from the society. Regarding it as a valuable application of an old invention to mining purposes, they award it the first bronze medal.

NOBEL'S NITRO-GLYCERINE.—The judges consider Mr. Nobel's Nitro-Glycerine a very valuable explosive agent, possessing enormous power, and, in addition, the great advantage of not exploding except when confined. The small space which it occupies, in proportion to its power, renders it necessary to drive only one hole for the removal of immense masses of rock, thereby effecting a great saving of labour. As far as they can judge, the increase of power, as compared with ordinary gunpowder, will enable it to be used at as small a cost. The judges saw a wrought-iron anvil, of about 3 cwts., blown to pieces with a charge of less than 1 ounce in a ¾-inch hole, and with a charge of 4 lbs. from 40 to 50 tons of rock was completely scattered, and the surrounding rock rent in all directions. It was computed that had the hole been less in diameter, the same effect would have been produced with a much smaller charge. They have much pleasure in awarding a first silver medal.

MECHANICAL.—No. 1, W. Rule, first bronze medal; 5 and 60, Hayward, Tyler, and Co., honourable mention; 7 to 20, Wavish Brothers, first bronze; 23, Falke's Refrigerator and Loysel's Hydrostatic Urn, honourable mention; 24 to 38, Coalbrookdale Company, first silver; 29, J. Atkinson, second bronze; 41, J. Henderson, 5*l.* 5*s.*; 46, W. Nodder, 1*l.* 10*s.*; 47, J. C. Tippet, second bronze; 49, Henderson, Wilson, and Newton, first silver; 50, H. Greenslade, 1*l.* 10*s.*; 51, Prentice and Co., first bronze; 52 to 54, J. Maynard, second silver; 56, C. W. Standish, honourable mention; 57, T. Coad, 3*l.*; 58, T. Coad, 1*l.*; 59, J. Couch, 1*l.*; 62, 63, W. Husband, first silver; 64, J. Wilson, 3*l.*; 65, J. Hicks, 1*l.* 10*s.*; 66, H. J. Anderson, first silver; 69, 70, 71, Arnold and Arnold, honourable mention; 72, J. Ewebank Leefe, first bronze; 74, J. Dearborn, second silver; 78, Grover and Baker, first bronze; 887, Ransomes and Co., first bronze; 80, J. A. Swanzy, first bronze; 81, W. Summerscales and Son, first bronze.—*Western Morning News.*

The British Association for the Advancement of Science.

GUN-COTTON—ITS MANUFACTURE AND APPLICATION.

One of the most important papers read at the British Association meeting was that of Mr. MANNING PRENTICE, "On the Progress of the Manufacture of Gun-Cotton."—Mr. PRENTICE said: Gun-Cotton, called by Liebig "the explosive of the future," has lately become a matter of great interest, engaging the attention of scientific men in this and other countries, has formed the subject of popular lectures, and has already been brought into practical use by many of our hard-working miners and quarrymen. This is mainly to be attributed to the striking manner in which the subject of Austrian gun-cotton, prepared by the process of Baron Lenk, was introduced at the Newcastle meeting of this Association two years since, when in the chemical section you, sir (Dr. Miller), Dr. Gladstone, and Prof. Abel, and Mr. Scott Russell, in the mechanical section, so ably called attention to the detail of its manufacture, and gave accounts of its mighty energy. This is only another instance in which the British Association proves its utility in assisting to develope practical results from scientific investigations. You will be glad to hear that during the past twelve months considerable advance has been made in the application of gun-cotton as an explosive material. Reports from various mining works indicate a steady progress towards the general use. At first it seemed probable that gun-cotton would be effectively and economically employed only in hard rock, such as granite. Doubtless in such material its full power was most easily developed. Experience showed, in working amongst soft rocks and coals, that the form in which gun-cotton had been prepared was not the best for obtaining satisfactory and economical results. The charge was confined in a small space, and acting on a short length of the hole or drill, showed immense force, but expended a considerable portion of it in enlarging the base of the hole, while the remainder had only the effect of splitting the rock, instead of throwing over the burden. The "mechanical application" to which gun-cotton seems so ready to submit was consequently varied. By the introduction of a "core" of wood, the charge of cotton was made to occupy double the length of hole, the wood filling the internal space of the charge, so that in the explosion a much larger surface was acted upon, while the gases were well confined. In this manner work is now executed in coal and in slate, obtaining even in soft material the full force which was at first claimed for gun-cotton in hard rock only—namely, six times that of an equal weight of gunpowder. Comparative trials have clearly demonstrated the superior power and advantages of gun-cotton. In Wales, driving through the "hard" overlying the slate vein, one of the contractors reports that his level or tunnel could be advanced 9½ yards when the men worked with gun-cotton, while 8 yards was the most accomplished in the same space of time when gunpowder was used. This point deserves the fullest consideration, for although gun-cotton used in holes, as ordinarily prepared for powder, is found to answer satisfactorily, there is no doubt that when judgment is exercised, and the work put before the holes is proportionate to the enormous power of the charge, a given distance will be advanced with a less number of holes, with consequently a further considerable reduction in the cost. In close underground work the fullest advantages are still more manifest. There is no smoke, neither are there those deleterious products which cause the use of gunpowder to be so noxious and injurious. In 1864, the Commissioners appointed to enquire into the condition of mines in Great Britain rendered their report to both Houses of Parliament. In reference to the air in mines, and the sanitary effects of gun-cotton and gunpowder respectively, the report of Dr. Angus Smith, F.R.S., merits attention. As gunpowder is evidently one of the most deleterious ingredients affecting the air of mines, the Commission was desirous that the products of combustion of gun-cotton should be examined, in order to find if that substance promised to perform the work of blasting with a less injurious influence on the air; for if gun-cotton could be used of a kind which gives out none of the oxides of nitrogen, an advantage of the most pleasing kind would be gained. The solid matter, the crystals and carbon, would cease to trouble the miner, as well as the sulphur compounds that follow every explosion. To examine this, Lord Kinnaird had arranged a meeting of captains of mines at Dolcoath, Camborne, with whom I was to act, examining the products of combustion. Accident prevented me going down the mine, but Mr. Richard Pearce, of the Royal Institution, Truro, took the apparatus down, passed the air through the solutions, and brought up specimens immediately after the explosions. Several solutions were examined, the amount of air passed through being 1470 cubic inches, but only a trace of oxides of nitrogen could be found in any, and with difficulty. Considering that nitrates could be found in a few cubic inches of air after the explosion of gunpowder, the result must be considered excellent. Whilst the experiments were going on underground, I selected a hut somewhat about the height and breadth of a "close end," and about 10 feet long, as fitted for making similar trials above ground. In this was laid a large mass of granite; a hole was bored in it by a miner, and it was fired with gun-cotton. The explosion was pronounced successful, but although it was believed by the miners present that the gun-cotton had done all to the stone that powder could possibly have done, they were surprised that the roof of the hut was not blown away. They held this as a proof that the action of the cotton was different from that of the powder. Probably the vapour of water condensed before reaching the roof. We all entered the hut instantly. The place was full of a light-coloured or nearly white vapour, with a rather pungent smell, having in it nothing at all resembling nitrous gas, or, indeed, any acid substance whatever. I could think of nothing similar to this containing nitrogen. After all there was not much of it, and it was far from resembling in intensity the smell of gunpowder after explosion in such a place. If the senses could detect any nitrous gases in the vapour, I would not speak in favour of it, but after remaining in the midst of it till it disappeared, I am compelled to defend it against any such charge. The man who bored was much pleased, and all the workmen with whom I spoke preferred the vapour of gun-cotton to that of gunpowder. There was now a new riddle. Why was there smoke, and what was the smell observed? No one seemed to know the smell of a fuse; it is never used by itself, and although sometimes it burns without lighting the charge, the men do not enter such places till the smoke is gone. In order to settle the point the hut was shut up, a burning fuse being enclosed in it. When we entered it, after two minutes, there was the same white smoke and the same smell before described: it was now explained to be that of distilled or half-burnt canvas and tar mixed with the gunpowder of the fuse. So strong was it that I do not hesitate to say that the smell of the gun-cotton was not in the slightest degree perceptible; in other words, it had no perceptible influence on the smell in the hut. Such a fuse is not necessary. It is not used everywhere, and in reality seems rather to be a peculiarity of some districts; those manufactured in Camborne for most places being different in composition. In every trial in which the effect on the senses or the breathing, and as far as we can judge on health, was considered, gun-cotton has come off with the highest character. I feel much confidence in speaking thus highly in its favour. Considerable interest in this subject has been excited in foreign countries, as well as in distant British colonies, in some of which the use of gun-cotton manufactured in this country is established. With reference to the manufacture two thing call for special remark. First, as to the stability of the material. In our anxiety to satisfy ourselves of this we submitted it to Mr. Hadow, of King's College, who fully confirmed our own analysis, and the following was his report:—"I have carefully examined the sample of gun-cotton rope, supplied as a sample of your manufacture, and am able to report favourably upon it. The gun-cotton proves on analysis to be the highest and most powerful explosive of the series of substitution compounds formed by the action of nitric acid on cotton. It contains the maximum amount of peroxide of nitrogen, corresponding with the formula $C_{36}\ H_{21}\ O_{30}\ 9\ NO_4$. This was proved by submitting a portion, carefully dried in vacuo, to the reducing action of an alcoholic solution of the double sulphide of potassium and hydrogen, when it gave an amount of cotton almost exactly corresponding to that which calculation requires (100 parts gave 54·80, calculation requires 54·54 of cotton); and, secondly, by treating another portion, likewise weighed after drying in vacuo, with a mixture of the strongest nitric and sulphuric acids for three hours, when the presence of any of the lower substitution compounds would have been detected by an increase of weight after washing and drying (the next lower substitution compound gaining 5·3, and the next lower 11·3 per cent. by such treatment). The sample, however, gained nothing in weight by the immersion; on the contrary, as experience has proved to be the case with gun-cotton that has reached the highest stage of substitution, a loss was sustained of 0·95 per cent., which corresponds very closely with what experiment shows to be the loss sustained always through solution by immersion of the strongest gun-cotton for three hours in the mixed acids.

To determine its stability it was placed in a tube with blue litmus paper, side by side with other samples, each contained in a separate tube furnished with litmus paper. These were then simultaneously submitted to the temperature of boiling water. Some of the samples showed immediate signs of decomposition, by reddening the litmus paper, and in a short time filling the empty part of the tube with the red vapours of peroxide of nitrogen; while the sample you supplied showed no trace of decomposition until about 40 minutes, before which time some of the more decomposable specimens had even exploded. From this result it may be concluded that your gun-cotton possesses a high degree of stability, and of all the samples I have examined it is the least likely to change during prolonged storing.

The sample was found perfectly free from all uncombined acids—it had, in fact, a very feeble alkaline reaction (due to silicate of soda), only discoverable by testing with care. Washed with water it loses about 3·08 per cent. in weight, the loss consisting of silica and silicate and sulphate of lime, partly suspended, partly dissolved, together with traces of organic matter, evidently introduced since the treatment with acids, as it is non-nitrated, and chars slightly on evaporation to dryness. The gun-cotton, after washing, still retains about 1·64 per cent. of silica and sulphate of lime.

In the preceding statement, as to the amount of cotton obtainable from the gun-cotton, and as to the weight after immersion in acids, the amount of ash and soluble matter was ascertained both before and after treatment, and was deducted in the calculations. In reply, then, to your questions, it may be stated that your sample consists of a definite chemical compound, the highest of the series; that it has been carefully prepared, being remarkably stable at 212°, and is quite free from uncombined acids.

The second thing calling for remark relates to the greater safety to the workpeople employed. The British Association was last year informed of the introduction of wet process, by which the gun-cotton was manipulated through all its stages in a damp or wet state. The suggestion that this plan should be adopted was made by Dr. Miller, when, with Dr. Frankland, Dr. Thomas Richardson, Prof. Abel, and Mr. Scott Russell, be

visited the manufactory, and inspected the operations. This has been extended even to the point of storing under water. The magazines at the factory now containing the stock of gun-cotton ropes, cut up into mining charges, consist of tanks with tons of the material submerged in many more tons of distilled water. As orders are received charges are taken out of the water, and in a few hours are ready for packing and delivery. It being, therefore, unnecessary that any large quantity of explosive gun-cotton should be kept on the works, great safety is attained, and the chance of any alarming accident is entirely removed.

In the application of gun-cotton to rifles and sporting guns considerable experience has been gained. The latest trials have been very successful, and indicate that we are arriving at the principles by which cannon cartridges also may be successfully prepared. From the scientific point of view, there are no instantaneous forces generated either mechanically or chemically, and motion or any process of composition or decomposition can only take place by degrees; but from the practical point of view there are compounds which decompose with such immense velocity, or which require such an extraordinary small space of time for their decomposition, that for all intents and purpose they may be considered instantaneous. Such compounds are called fulminating. Experiments with gun-cotton show that it may be made, practically speaking, instantaneous in its decomposition. Using high densities (30–40 lbs. per cubic foot), in an open condition, or, in other words, producing many channels through the dense mass of the compound, the destructive effect of such confined masses of gun-cotton is, in every respect, similar to the strongest fulminates. It is well known that fulminating compounds cannot be used for propelling projectiles, on account of the destructive effects produced upon the guns. The whole point of the possibility of the application of gun-cotton, therefore, turns upon the question, whether or not a certain quantity of gun-cotton can be made to decompose in the given time required by a mass to move through a certain distance, when propelled by a force limited to the strength of the gun. It would lead too far to enter into the details of the trials which have satisfactorily showed that the time of decomposition of a certain gun-cotton charge may be increased considerably beyond the requirements of the artillerist—or the compound may be made too slow for purposes of artillery. It has been found that the gun-cotton charge must be divided into at least two individually different parts, which, for the sake of clearness, may be called the exterior and the interior charge. The mechanical composition of both these is materially different; the exterior being a small fraction of the whole (from about one-sixth to one-third) in an open condition of low density (3 lbs. to 10 lbs. per cubic foot) in relation to the space in which it explodes. This generates the initial pressure required to start the shot from rest. The interior charge, on the other hand, being sufficiently separated from the other, by a strong resisting medium, and ignited at one or more ends by the explosion of the outer charge, contains the remaining quantity of gun-cotton (5·6 to 2·3) under a high density (40 lbs. to 80 lbs.). The object of the interior, or core, charge is to generate the propelling gas during the motion of the projectile through the barrel of the gun, and to supply the gas at a rate corresponding to the accelerated motion of the projectile. The resisting medium which separates the outer and inner charge may be a cylindrical tube of considerable strength, and it has been found that the relative quantity and density of both charges—outer and inner—and the dimensions of the cylindrical tube, its inner diameter, lengths, and thickness, are quantities so intimately connected that the omission of, or inattention to, one of them wholly impairs the effect, uniformity, or powers of the gun-cotton cartridge.

Without going into actual figures, it may be stated that the initial velocity of the Enfield rifle projectile, with the use of such gun-cotton cartridges, already exceeds the initial velocity of the service gunpowder charge. This has been tested by means of trajectories due to gun-cotton and gunpowder charges, each projectile recording its path of flight or trajectory. The maximum incurvation of the trajectory of the service gunpowder charge of the Enfield rifle, within a hundred yards of the muzzle of the gun, being on an average 3 and ⅜ inches—that of a series of gun-cotton cartridges made on the above principle has been on the average 3⅛ inches. The gun-cotton trajectory being, therefore, flatter by ¼ inch in the first hundred yards. The path of the projectile was recorded by means of screens every 50 feet apart.

These velocities have been obtained with a service Enfield rifle, out of which about 2000 gun-cotton rounds have been fired without any signs of distress upon the gun, as officially reported by the inspector of small arms at Woolwich.

The trials of gun-cotton cartridges for rifles and ordnance being in course of progress, it is for the present preferred not to give definite quantities respecting the construction of such cartridges. When the gun-cotton charges shall have been finally settled by the Government committee, a full account of the trials will doubtless be given. The cartridges will give still better results when made with machinery better adapted to insure uniformity of construction. The actual dimensions and quantities of gun-cotton cartridges for fowling or sporting guns may be given, from which a general idea may be gained as to the construction of gun-cotton cartridges. Breech-loading sporting gun, gage No. 16, charges made up in cases, gun-cotton charge; exterior, 4·3 grains gun-cotton muslin; interior, 18 grains of solid 6-fold braid of fine yarn; density of core charge, 67·33 lbs. per C.F. Dimensions of cylindrical tube containing core charge: length of tube, ·94 inches; inner diameter, ·35 inches; outer diameter, ·5 inches. First wad, next the gun-cotton cartridge, boiled in wax; second wad, soft, as usual, 1 oz. of shot, ignition of core charge both ends. The shooting of this cartridge is superior to sporting gunpowder in every respect. One little incident from the sporting field is not without significance. The boy carrying the game bag made the following homely remark:—"This cotton business is likely to be a bad thing for the birds," as he found his wallet filling much more rapidly by the gun which was fired with the gun-cotton than that charged with gunpowder. Such a remark would not excite surprise with any person who had seen the greater penetration, and the more equable distribution of the shot, as shown by the state of the targets after a competitive trial with each explosive.

The PRESIDENT observed that the fact of gun-cotton being easily stored in water especially recommended it to the consideration of all it interested. The experience they had obtained was that in mining operations it was likely to be substituted for gunpowder, although no person would be bold enough to say that it would entirely supersede gunpowder.

Mr. ABEL said he had been engaged, and was still engaged, in making a number of experiments on gun-cotton, and he was able to bear out Mr. Prentice's remarks. He had preserved gun-cotton immersed in water for 18 months, and it was still as good for practical purposes as at first.

Mr. ARCHER thought experiments should be made upon vegetable silk fibre, which was almost valueless for commercial purposes, but would, he thought, be applicable to the purposes of manufacturing a material in lieu of gun-cotton. This was especially worthy of consideration, when the supply of cotton, as at the present time and for some time past, was rather limited.

The PRESIDENT said they were much indebted to the last speaker for his suggestion, and hoped scientific men would take up the idea. It was very essential that, if silk were used, the vegetable fibre should be perfectly clear, and this was the advantage of the application of cotton.

ALKALI METALS ON GUN-COTTON.—Mr. W. S. SCOTT stated that in the course of some experiments he accidentally dropped a piece of potassium on some gun-cotton lying on his laboratory table, and was surprised to see that the gun-cotton immediately exploded. He then instituted a series of experiments to ascertain what conditions were essential for explosion to take place—whether the explosion was due to moisture, whether other metals would act similarly on gun-cotton, &c. He found that by taking precautions to prevent friction, the gun-cotton still exploded. When sodium was used a like result was obtained, even though the gunpowder was rendered perfectly anhydrous. If amalgam of potassium or sodium were used no result was obtained. Various metals were tried, but decided effects were obtained only with the metals of the alkalies. In the course of his paper, the author stated that if metallic arsenic were mixed with gun-cotton a blow of the hammer was sufficient to fire it. In illustration of his discovery, Mr. Scott demonstrated in the room that a piece of potassium fired instantly a piece of gun-cotton, into which it was dropped.—In reply to Prof. Wanklyn, Mr. SCOTT said he referred the action to that class of phenomena known as catalysis.

MINERALS FROM SOUTH AMERICA.—Mr. DAVID FORBES exhibited several new minerals from South America. The first shown was a specimen of native copper, in hexagonal prisms. The centres of the crystals were occupied by carbonate of lime, and Mr. Forbes said he viewed these crystals as pseudamorphs of arraganite, the carbonate of lime having been partially replaced by copper. He had made an experiment which confirmed this view. A piece of calcite was placed in a solution of sulphate of iron and sulphate of copper, and it was observed that, in the first place, carbonate of copper was deposited on the crystal, and, afterwards, that the sulphate of iron reduced the carbonate of copper, so that metallic copper ultimately occupied the place of the calcite. Another mineral exhibited was Darwinite, named thus as it was found near that part of South America which Dr. Darwin explored. It consisted of a combination of copper and arsenic, in the proportion of 18 equivalents of copper to 1 of arsenic. A mineral similar to this has also been found near Lake Superior, in North America. A silicate of copper and alumina was next exhibited—a mineral having the appearance of schorl, and at first appearing valueless. In consequence, however, of the copper it contained, the mineral fetched a great deal of money. A specimen of metallic bismuth, containing 5 per cent. tellurium, was also shown.—Dr. GLADSTONE thanked Mr. Forbes on behalf of the section for his communication, and referred to the commercial advantages of the discovery.

COLOUR OF GOLD.—Mr. FORBES also read a paper "On the Colour of Gold, as seen by Transmitted Light." Of course, they all knew the common experiment of holding a piece of gold leaf to the light, and were aware that the light transmitted was of a green colour. When, however, gold was precipitated by oxalic acid, a portion adhered to the glass, and this portion appeared blue by transmitted light. From experiments the author of the communication had carried out, in conjunction with Dr. Lloyd, he had arrived at the conclusion that the colour of gold by transmitted light was blue, and that the green arose from a mixture of this blue with the yellow from the surface of the gold, as seen by reflected light. A very neat experiment was then described, to illustrate this:—A thin glass globe, containing 6-100 per cent. of gold was blown, and the gold afterwards reduced by carbonic oxide. On looking into the globe it was of a beautiful blue colour.

GOLD IN WALES.—In connection with the recent gold discoveries in Wales, Mr. J. W. SALTER explained his map of the Faults in the Gold Districts of Dolgelly. The bottom beds of the district consist of Lower Silurian, and are succeeded by black shales, with interbedded porphyries and traps. It is at the junction of these two divisions that the most prolific gold veins are found. No faults are laid down for this district in the Survey maps. The author had worked out the faulted structure of the locality. The main lines are along the strike of the beds. These are connected by great cross lines of disruption. There are at least four series of faults to be easily made out. With respect to the filling of the veins, the older faults contain a mixture of metals, while the newer are mostly filled with single minerals.

Mr. T. A. READWIN, Stretford, read a paper "On the Recent Discovery of Gold at Gwynfynydd." He stated that at the Gwynfynydd Mines an unusually large number of quartzose lodes have been laid bare at the surface, or partially opened, varying in width from 1 foot to 66 feet, and gold can be seen in the lodes at the present time in fifteen different places. These lodes run principally north and south, and north-east and south-west, and are all more or less auriferous, containing occasionally very rich sulphide of silver. The lode, which may be called the caunter, passes from the bridge-lode in a N.N. easterly direction. It is 2¼ ft. wide, and has an underlie north of nearly 6 ft. in a fathom. It is composed of ferruginous quartz, with occasional spots of galena. The lode has been costeaned for about 50 fms in length, and visible gold found in several places. The loose earth taken from the back of the lode is also auriferous. About 40 fathoms further N.N. east, the continuation of this caunter appears to intersect the Cwmheisian great gold lode. Very rich specimens of gold have been taken out of this caunter and the supposed Cwmheisian great lode, and at about 3 fms. from the junction of these lodes some splendid specimens have been found in the slopes. The outcrop of this probable caunter is more than 70 fms. above the level of the Mawddach. This great elevation from the river renders mining operations here by levels and tramways very easy and comparatively inexpensive. The Bridge lode is opened on the western side of the mountain, about 200 fms. from the caunter lode workings. It is about 3 ft. wide, and underlies north about 1½ ft. in a fathom. It is composed of quartz, and contains occasionally blende, copper pyrites, and galena, the latter containing about 50 ozs. of silver to the ton, and a little gold. The lode-stuff is auriferous. The Gwynfynydd great lode appears to be the champion lode of the series. Many of the difficulties of amalgamation can now be overcome by the use of metallic sodium or potassium, in some such way as recently patented by Mr. W. Crookes, F.R.S. The plan now in use at Castell Carn Dochan and Clogau will collect nearly all the metallic gold, and the greater part of the remainder is certainly obtainable by the addition of self-acting apparatus, such as is constantly used at Schemnitz. The following returns of gold raised in the Dolgelly district of Merionethshire may be taken as approximately correct:—

1 t.	4 c.	0 q.	0 lb.	of quartz from	River Mawddach	gave of gold	2 ozs.	0 dwts. 0 grs.
5	0	0	0	"	Ceindeuddwr	"	8	0 0
5	1	3	6	"	Gwynfynydd	"	15	15 12
50	0	0	0	"	Cambrian	"	30	0 0
20	0	0	0	"	Hafod-y-Morfa	"	63	0 0
312	1	2	0	"	Dolfrwynog	"	167	5 5
300	0	0	0	"	Cwmheisian	"	176	0 0
50	0	0	0	"	Clogau, prior to 1860	"	200	0 0
418	18	2	9	"	Castell Carn Dochan	"	481	0 1
1602	18	1	4	"	Cefn Coch (Welsh Gold)		585	7 5
4493	15	3	8	"	Clogau, since 1860	"	11,505	2 16
7259	0	0	0				13,233	10 15

Two bars of gold, weighing 104 ozs. from 150 tons of quartz from Castell Carn Dochan Mine, were exhibited.

REMARKABLE SPECIMENS OF IRON.—Among the articles exhibited at the Town-hall, in connection with the Congress of the British Association, were some samples of iron, manufactured and exhibited by Messrs. Job Richards and Co., of Rabone Bridge Ironworks, near Birmingham. The specimens consisted of gun iron, crystalline iron, cable iron, angle iron for boiler purposes, melting iron for steel purposes, and best cable iron. The peculiarity of this iron is that it is very clean and crystalline, like steel, but has all the strength, toughness, and ductility of the best quality of wrought-iron, and may be worked either hot or cold. Col. Campbell, of the Royal Gun Factory at Woolwich, has tested the iron, and reported upon it so favourably that Messrs. Richards and Co. have received a large order for iron, to be used in the making of Armstrong guns in the Government factory.

THE EXTENT OF OUR COAL MEASURES.—In a well-attended lecture delivered at the Town-hall, by Mr. BEETE JUKES, F.R.S., and Local Director of the Geological Survey of Ireland, on "The Probabilities as to the Position and Extent of the Coal Measures beneath the Red Rocks of the Midland Counties, the lecturer remarked that, although not authorised to speak for the director-general or his colleagues, he would for himself be inclined to accept the responsibility to a certain extent. The Geological Survey should be able better than any one else to say—first, what was the approximate thickness of the New Red Sandstone at any locality; secondly, whether Permian rocks would be likely or not to occur below it at that locality, and how thick they would probably be; thirdly, whether it was more or less likely that a good thickness of coal measures should remain undestroyed beneath those two groups of red rock in that locality. Numerous trials have been made of late years in different parts of the red rocks, which could only have a foolish waste of money as their result. Anyone intending to try for coal beneath the red rocks must be prepared to sink boldly a thousand yards before he has a chance of meeting with the coal measures. In such a hazardous speculation we cannot expect private individuals to engage. It must either be undertaken by a combination of proprietors, such as was now being carried out by Messrs. J. S. Dawes within the limits of the South Staffordshire coal field, near Halesowen, or it must be undertaken at the expense of the nation. Mr. Jukes declared his own opinion to be that the national importance of determining the extent and position of the coal fields beneath the red rocks of the midland counties was so vast that the exploration must be made at the national expense, with, of course, every fair provision for its repayment by those most immediately benefited by it.—Lord STANLEY said the subject to which Mr. Jukes had addressed himself was not a subject of pure science, but one of much practical interest, and even of national importance. The question of the possible exhaustion of the coal fields of England had attracted a good deal of attention, and caused even some degree of anxiety. Nor was that wholly without reason; for, however vast our coal fields might be, they were yet limited in extent, and being limited could not be replaced. Thus we were, so far, living upon our national capital. They all knew how much the prosperity of the country depended upon the prosperity of its manufacturing industry; and that, again, depended in turn upon the cheapness of the supply of fuel. For those who desired to go rather more deeply into the facts of the case, as far as they were known, than was possible within the limits of an oral address, he should recommend two books upon the subject, published within the last two or three weeks—one by Mr. Hull, the other by Mr. Jevons, both gentlemen connected with the Geological Society. They differed somewhat widely in conclusions. The one took what they might consider a sanguine view of the case—the other a view comparatively despondent; but in both one and the other they would find what was, perhaps, more important than the inferences of those authors—and that was a very ample stock of materials upon which to found their own conclusions. The question was not whether they could obtain coal at a vast depth beneath the surface of this country, but whether they could obtain it at such a depth and under such circumstances as would enable them to compete with America or other rising countries better supplied with mineral fuel?

THE SOUTH STAFFORDSHIRE COAL FIELD.—Several highly-interesting papers bearing on this subject were read. With regard to "The Economic Value of the various Measures of Coal and Ironstone in the South Staffordshire Coal Field," Mr. SAMUEL BAILEY, of Walsall, stated that the minerals produced in this district are doubtless amongst the most valuable in the United Kingdom. The ironstone measures, together with the seams of coal, form a mixture from which iron of a superior quality can be made, and have placed this foremost among the iron-making districts of the country. To give some idea of the vast productiveness of a particular locality of this coal field, it may be mentioned that the coal and ironstone gotten there realised a commercial value of 20,000*l.* per acre. This was, however, in the days of South Staffordshire's greatest prosperity.—The next paper was by Mr. HENRY JOHNSON, of Dudley, "On the Extension and Probable Duration of the South Staffordshire Coal Field." Both the extension and duration of this coal field are questions open to a very great difference of opinion. If the extent were limited to the at present explored portion of the district the duration might be tolerably accurately calculated, as all the coals that can be possibly reckoned upon in a descending order in this coal field have long since been discovered. It is to the confines of the present coal field, then, that any hopes for fresh supplies can be looked for, and it is a very interesting fact that on all sides of the coal field explorations are being most successfully carried on, with perhaps the exception of the eastern boundary on the Birmingham side. During the last ten years—more especially the last five—a great number of new winnings have been made in the north end of Cannock Chase district, as also in the north-east at Aldridge, and at Himley and other places; but probably the most important recent trial sinkings are those on the south end of the coal field, in the neighbourhood of Halesowen, Congreaves, Cradley Park, and Wassel Grove. In the event of the one at Halesowen, belonging to Mr. S. Dawes, and that of Wassel Grove, belonging to Messrs. George Pell and Co., discovering the thick coal—both of which look very promising, and are now sunk to about half-way to the coal—more than 4000 acres of the thick seam may be considered proved, and this assurance will, no doubt, give a fresh impetus to additional search even further south than those now in operation. To attempt to estimate the probable duration of the coal field, while these somewhat important recent additions are being added to it, would be impossible; but it may be remarked that such additions are not keeping pace with the enormous consumption, and consequent rapid destruction of the parent portion of the coal field.—The CHAIRMAN thought Mr. Johnson's paper was a very valuable communication. He alluded particularly to the probability of finding the thick coal of South Staffordshire underneath the Permians bounding the district. He had no doubt that the coal will be found all round the coal field under the red rocks, as was found at Earl Dartmoor's sinkings near West Bromwich, and will be then found of even better quality than it is in the older portion of the field, because in the central part the coal is very much affected by its proximity to the igneous rocks.—Mr. CHARLES TWAMLEY read a paper "On the Faults of the South Staffordshire Coal Field, and their Relation to the Igneous Rocks of the District."—Mr. J. B. JUKES said that he could not agree with Mr. Twamley in assigning a purely local origin for the numerous faults of the South Staffordshire coal field. Faults are characteristic of the palæozoric formation generally. He believed that the igneous rocks were in existence before the faults were produced, because the Rowley Hills have been cut off by the Russell's Hall fault. He placed the age of the igneous rocks of the district at the close of the carboniferous period.

THE COAL MEASURES IN THE MOLD VALLEY.—In a paper on this subject, read by Mr. W. NESS, the author, after describing the various seams of the Mold Valley, pointed nut the similarity of this coal field with that of the Fire coal field. The Cannel coal, near Mold, consists of curly, smooth, and shaly varieties. The main coals have long been worked out from this district, and the Cannel has only been discovered a few years. Numerous faults intersect the district. The upper portion of the Cannel coal has been in great part worked. The distillation of the Cannel coal is extensively carried on in this district, and the retorts in use were described.—Mr. HENRY BECKETT thought it highly probable that the measures in the Denbigh district will be found identical with those of the Mold Valley. Fish remains prevail in this district, and he believed that the oil obtained from the ova is intimately connected with the occurrences of fishes in these deposits.

WELDLESS TYRES, CIRCULAR ROLLING, AND RAILWAY WHEELS.—In a paper on this subject, by Mr. F. J. BRAMWELL, the process of making weldless tyres, as adopted by the Owen Company, was described; it consisted of making a helical coil of about half the diameter and three times the width of the intended tyre. This coil to be heated in a furnace, and then put into a mould on the anvil of a steam-hammer, and (by the action of the top tool on it) welding it into a ring blank, about half the diameter and twice the thickness of the finished tyre. The process was finished by the removal of this block to a circular rolling-machine, on Bodmer's principle, but combined with hydraulic power of such character as to be capable of rolling out the tyre to its proper decreased thickness and increased diameter. The paper then went on to show that not only was the manufacture of weldless hoops completed by circular rolling, one that ensured soundness and safety, but that, also, in consequence of dispensing with the "crop ends," and of the passing backwards and forwards of the bar being rolled, both of which accompany and are drawbacks to ordinary rolling, such manufacture of weldless hoops was really an economical mode, and might be advantageously employed in the manufacture of all heavy straight bars, rails, and plates, which would in the first instance be rolled into the ring form, and then that ring being cut through would be got by flattening it out in the same way that sheets of glass were made, by laying open the cylinder into which shape the glass was first formed. The paper pointed out how beneficial the use of weldless rings would be for boiler work, as they would dispense with the longitudinal seams, which were the source of weakness in boilers.

REGENERATIVE GAS-FURNACES.—A paper "On Siemen's Regenerative Gas Furnaces and Producers" was read by Mr. S. Cox. It was stated that by Siemen's process a flame was obtained, equal to a white heat, which could not contain anything that could injuriously affect the most delicate manufacture, for even sulphuring was prevented, for the sulphur in separating from its hhydrogen took up oxygen supplied by the carbonic acid and water, forming sulphurous acid, a firm compound, which was not decomposed on meeting metallic oxides in the furnace. The nature and intensity of the flame was also under the instant control of the man in charge of the furnace, so that the chemical nature of the flame could be altered at will—one minute an oxidising flame being obtained, and the next a reducing or carbonising one. So also the amount of the flame could be altered from the smallest flicker to the complete filling of the chamber with an intense body of flame. The paper pointed out the immense advantage thus obtained in furnaces where the delicate operation of heating or melting steel was carried on; and hence a great number of influential firms were now adopting the furnaces in England for re-heating purposes, especially for re-heating steel blooms and ingots. Besides the saving of fuel, there were other advantages in the working of the furnace, such as cleanliness, no solid fuel being brought into the shop where the furnaces were, the fuel being converted into gas at any convenient distance from the furnaces; compactness of arrangement, saving of labour, and, above all, improvement in the processes themselves. In every trade in which the furnaces might be employed the same advantages were apparent; and though the furnaces were costly, and required a large outlay at first, especially in old works, they soon paid for themselves.

ATMOSPHERIC HAMMERS.—Mr. GEORGE BURT, of Birmingham, read a paper on a Pneumatic Hammer, of which he submitted a model for inspection. He said it had been found extremely useful in trades which were largely carried on in Birmingham—the size of the anvil or the thickness of the metal under operation being of no consequence, and the variation in force of the blows being effected instantly by a movement of one handle within easy reach of the hammer-man. It is not pretended that the hammer at all approached the power of a steam-hammer of the same total weight, or that it would take the place of the steam-hammer for general smiths' work. The advantages claimed for it were that it was very simple, especially in its single acting form, as shown by the model; that there were no valves in constant motion and wear; that the momentum of the driving parts connected with the crank shaft was very small on account of their small extent of motion (a throw of 1 inch only being given to the 10-inch piston), that the wear on these parts was consequently very slight, also owing to the elastic nature of the medium between the driving and driven pistons; that there was an absence of all dropping of condensed steam, such as would invariably be caused by the steam-hammer, and which would be fatal to a surface under the operation of being planished.—Mr. W. D. GRIMSHAW read a paper "On Grimshaw's Improved Atmospheric Hammer." Having described the invention, which is more complex in structure than the one introduced by Mr. Burt, the paper set forth that it was claimed for these atmospheric hammers that they showed, in working, a considerable economy as compared with steam-hammers of equal force of blow. In the majority of cases, where hammers worked by power are used at all, they were from the exigencies of the trade placed at distances from the boiler or engine that were unfavourable to the economical conveyance of steam to them. For every 100 lbs. of steam generated, not more than 60 or 65 lbs. reached the hammer; whereas Grimshaw's hammers, which are worked by shafting and belting, can be driven at a loss of only 5 per cent. of the steam used in propelling the engine employed to drive it. Conversation ensued, after which, the writers were respectively thanked for their papers.

PATENT STEAM PILE-DRIVER.—Mr. W. SISSONS (of the firm Sissons and White, Hull), read a description of the Patent Steam Pile-Driver, manufactured by that firm. By the machine the ram falls 12 times in a minute, with a 5-ft. lift. The size of the bottom frame is only 7 ft. 6 in. square, and it occupies a smaller space than an ordinary hand machine; and can be used in any situation, on land or afloat, where the other can. It supplies a deficiency long felt—namely, something more powerful and expeditious than hand machines, and something less ponderous and costly than those steam machines hitherto brought out. During the past six years 54 of them have been made; seven of them are now in use on the Thames Embankment, and Mr. Brassey has five in operation in Gallacia. The writer of the paper received the thanks of the Section.

SHEATHING OF SHIPS, &C.—A paper "On the Sheathing of Ships, and the Extraction of Silver from Sea Water by means of Electricity," was read by Sir JOHN BOWRING. The object of the paper was to show that silver might be extracted from sea water, and that at the same time the copper sheathing of vessels would be protected. The sheathing of a ship might, by condecting it with the zinc element, be converted into the negative electrode, and by placing a positive pole in the sea water the metals the water contains would be precipitated on the copper—as in the electrotype process; and the author concluded that hydrogen would be evolved from the copper, preventing the adhesion of barnacles. He had no opportunity of trying experiments, but he thought the hints might be useful to the members of the Association.

ANILINE COLOURS.—Dr. HOFMAN described a discovery he had made with respect to the composition of colours obtained from aniline. The members of the section were aware of the colour of magenta, and knew, no doubt, of the action of aniline upon it in producing a blue dye. The object of his communication was to explain the changes that took place in the conversion of magenta into aniline blue. The composition of magenta was represented by the formula $C_{20}\ H_{18}\ N_3\ O$. Now, if three atoms of hydrogen of the magenta were replaced by three atoms of phenyl the blue compound was produced, and as aniline consisted of phenyl in association with hydrogen and nitrogen, the explanation of the action of that substance in producing the blue compound was easy. Moreover, intermediate violet compounds existed, and these were produced by the action of aniline, on a less number of atoms of phenyl being substituted.

Thursday was wholly devoted to excursions. The largest, and by far the most popular, party was that arranged for the South Staffordshire districts, including also Dudley. From Dudley the visitors naturally branched off to Round Oak and Tipton. At the former place Earl Dudley's magnificent ironworks were passed through, and miracles of scientific ingenuity and skill were inspected. To those interested in ironmaking it is a great sight to see a bar of iron 3½ in. thick twisted cold, and formed into the knot that constitutes the coat of arms for the county. This was exhibited many years ago to mechanical engineers, and, in conjunction with many other wonders, was shown to the members of the British Association. At Tipton the extensive works of Messrs. Barrows and Sons, Philip Williams, Walter Robinson, and Messrs. Millington and Grazebrook were visited, and the various processes of puddling, shingling, and rolling were gone through by modern Vulcans, amidst the frequently-expressed admiration of the company. At Oldbury the far-famed carriage works which formerly belonged to Mr. Johnson were visited, and the various stages of manufacturing railway-trucks, vans, and carriages exhibited to the excursionists. The Bromyard ironworks are visited by every scientific association that sojourns in the midland counties, and proved no exception to the rule, while the generous hospitality of Messrs. W. H. Dawes and Co. rivalled the munificence with which the association was entertained at Dudley. At Wednesbury, Messrs. Lloyd, Foster, and Co., the Patent Shaft and Axletree Company's Works, and other places, were looked into; and here again scientific men were expected to be hungry and thirsty, and a sumptuous luncheon was set out to entertain them. The repast was set out in the extensive workshops of Messrs. F. James Russell and Sons, who are amongst the largest makers of gas and water tubes in the world. An extensive and important section of the South Staffordshire coal field has been opened up during the last twelve or fifteen years at Cannock Chase, and those who were at the visit of the British Association to this place in 1849 must have been vividly impressed with the contrast between the Cannock Chase of today and the Cannock Chase of 1849. We must not omit to mention that great centre of the lock-making trade, Willenhall, in addition also to that particular and very interesting feature of the hardware district. There is here some "open working," where 36 ft. of coal crops up to the surface. To the geologist especially the vein of coal is interesting, running as it does for miles through the country, and appearing on the surface only once or twice.

CAST-STEEL FOR BOILERS.—A most intelligent and energetic mechanic, Mr. S. H. Roper, of Boston, Mass., has been for some time engaged in making steam-carriages for experimental purposes, with a view to obtain the greatest efficiency for the least weight, and to render the steam-carriage an independent, convenient, and useful motive power. In these efforts he has been highly successful, and although he regards the carriage more as a plaything than for its general utility, he has pursued the subject thoroughly, and decided some questions which are interesting to the mechanical community. These relate chiefly to a reduction of weight for steam-engines and boilers of a given power. This steam-carriage weighs but 450 lbs. in complete running order, with water for eight miles. The cylinders are double, direct-acting, 3¾ in. bore and 10 in. stroke. The boiler is the most remarkable detail, and is a novelty worth seeing. The shell is 30 in. long and 15 in. diameter. It is a vertical tubular boiler, with an internal fire-box, and the tubes are 10 in. long by 9-16ths diameter. The shell, as well as the tubes, is made of steel, and it is in the employment of this material that Mr. Roper has been able to reduce the weight, and not only maintain but increase the evaporative efficiency of his boiler. The shell is 1-30th of an inch thick, while the tubes are only 1-40th. With this boiler steam has been raised in eight or ten minutes, and it is capable of bearing a pressure of 90 lbs. per square inch with entire safety. It supplies all the steam necessary for the two cylinders, and propels the carriage eight or nine miles an hour without any difficulty. In this machine we have one of the most novel steam-boilers ever made. And it is a matter for earnest consideration whether, in the employment of cast steel for steam-boilers, we may not only greatly increase the strength and reduce the weight, but also add to the economy of the apparatus, by facilitating the transmission of heat. To use a homely illustration, a thin tea-kettle boils more quickly than a thick one; and, for the same reason, steam-boilers with unnecessarily heavy flues, flue sheets, fire-box walls and furnace crowns, transmit less heat than lighter ones. The only danger to be apprehended in departing from the established time-honoured rules and precedents in this case is in weakening the structure. An example of what a thin iron flue is capable of sustaining, was shown in Lee and Larned's steam fire-engine *Niagara*. This steamer had a large vertical boiler, the tubes in which were but 1-30th of an inch in thickness and 1½ in diameter, by some 4 ft. long. We have repeatedly seen 240 pounds to the square inch on this boiler, or others with tubes no larger or thicker. Some of the tubes were occasionally collapsed so flat, however, that neither steam nor water could pass through them. These were drawn iron tubes; but if steel had been employed they would not have failed, because the latter metal has a higher tensile strength. Another lesson on the value of good workmanship is given by Roper's boiler. To bear the pressure required of them, the tubes must necessarily be small in diameter. They were, therefore, all drilled and turned, and were thus homogeneous throughout. Such a method of making a steam-boiler is, of course, expensive; but if the evaporative efficiency is increased thereby, as it is, it is only a question of first cost, for the money returns in the future by the fuel saved. The rapidity with which the heat is transferred from one substance to another is directly in proportion to the difference of temperature between them. The conducting power of steel is lower than that of iron; the former being, according to experiment made by Weideman and Franz, 224; while steel is but 218. But this difference is so small as to be of no moment, and is wholly nullified when the tensional strength of the two metals is considered; for, by taking advantage of the superior virtue of steel, we can make a structure much lighter of it, for a given strength. Moreover, in a cast-steel boiler, the rapidity with which heat would be transmitted through the thin walls would be less likely to burn the exposed parts—the tube, sheet and fire-box crown—than in the comparatively slow action of thick iron plates. Very many persons confound strength with weight, and suppose that, because a number of pounds of material are added to a certain part, a corresponding increase of strength is obtained. Nowhere do we find this more prominently illustrated than in steam-boilers; too often the essential points of safety are neglected, while those which bear no strain are heavy in the extreme. It is, therefore, with a view to promote the efficiency of steam apparatus and economy in its use that we suggest further experiments in this direction. Cast-steel of fine texture, well riverted and annealed very low, would seem, from the experiment of Roper, capable of sustaining great pressure. We doubt if a boiler 30×15 in. was ever made which furnished so much steam, or was capable of evaporating so much water in proportion to its size, as this one. If, by a corresponding increase in thickness of plates and external dimensions, boilers can be built of proportionate strength a great economy of space would result in sea-going ships.—*Scientific American.*

CAUTION—TO MANUFACTURERS OF TIN AND TERNE PLATES.—The Undersigned, being PATENTEES of TWO PATENTS for IMPROVEMENTS IN THE MANUFACTURE OF TIN AND TERNE-PLATES, dated and numbered respectively June 6, 1860, No. 1393, and March 19, 1863, No. 738, HEREBY GIVE NOTICE to all Manufacturers of Tin and Terne-plates that they will be LIABLE FOR ANY INFRINGEMENTS or USE OF THE SAID PATENTS, or either of them, unless they are protected by licenses to be duly granted by the said patentees, and which licenses the said patentees are ready at any time to grant upon terms to be agreed upon, upon application to them at the Cookley Ironworks, near Kidderminster. JOHN SAUNDERS.
Cookley, August 12, 1865. JOSH. PIPER.

FORTUNA COMPANY (LIMITED).—Notice is hereby given, that the HALF-YEARLY MEETING of the shareholders in this company will be HELD at this office on FRIDAY, the 22d inst., at Twelve o'clock, to receive the accounts, balance-sheet, and reports of the directors and auditors for the half-year ending 30th June last, and for the general purposes, as authorised by the Deed of Settlement.
By order of the Board, J. B. COLOGAN, Secretary.
No. 5, Queen-street-place, Upper Thames-street, London, Sept. 1i, 1865.

LINARES LEAD MINING COMPANY (LIMITED).—Notice is hereby given that, in conformity with the Deed of Settlement, the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at this office on FRIDAY, the 22d inst., at One o'clock P.M., to receive the accounts, balance-sheet, and reports of directors and auditors for the half-year ending 30th June last, and for the general purposes, as authorised by the Deed of Settlement.
By order of the Board, J. B. COLOGAN, Secretary.
No. 5, Queen-street-place, Upper Thames-street, London, Sept. 11, 1865.

THE CWT-Y-BUGAIL SLATE COMPANY (LIMITED).—At an EXTRAORDINARY GENERAL MEETING of the shareholders of the above company, held, by adjournment, at the Company's Quarry, Penmachno, on the 25th day of August, 1865, it was unanimously resolved—"That so much of the 38th clause of the company's Articles of Association, dated the 8th day of December, 1863, as provides that the general meetings of the company shall be held in Bangor, in the county of Carnarvon, shall be rescinded, and that, instead thereof, the following provision shall henceforth be read as forming part of Clause 38, viz.:—The general meetings of the company shall be held in Bangor, in the county of Carnarvon, unless the directors shall from time to time, or at any time, determine otherwise, and in any such case the then next meeting shall be held at the place to be named in the notice of such meeting to be given in pursuance of Clause 44 of the said articles, save and except that in case of a meeting being convened by the requisitionists or other members referred to in the 43d clause of these articles (in default of the directors convening the same), such meeting shall be held at such place in London or Bangor, or at the Company's Quarry, as shall be named by such requisitionists or other members in their notice of the meeting."
Shareholders are requested to take notice that an extraordinary meeting will be held at the Penrhyn Arms Hotel, in Bangor, in the county of Carnarvon, on Thursday, the 21st day of September instant, at One o'clock P.M., for the purpose of considering and, if deemed expedient, confirming the above resolution.
Bangor, 4th September, 1865. J. HAYWOOD, Managing Director.

THOMAS DUNN AND CO. (LIMITED).
WINDSOR BRIDGE IRONWORKS, PENDLETON, MANCHESTER.
BANKERS.
Manchester and Liverpool District Bank, Spring-gardens, Manchester, and the branches.
Union Bank of London, London.
NOTICE IS HEREBY GIVEN, that the SHARE LIST WILL CLOSE for England on TUESDAY, Sept. 26, 1865. J. WORTLEY WILLIAMS, Secretary.
26, Market-street, Manchester.
Prospectuses and forms of application for shares to be had of the bankers and secretary.

THE CHANNEL STEAM-SHIP COMPANY (LIMITED).
Incorporated under the Companies Act, 1862, by which the liability of each shareholder is limited to the amount of his shares.
Capital £240,000, in 16,000 shares of £15 each, with power to increase.
First issue 8000 shares.
Deposit on application, £1 per share. Further payment on allotment, £1 per share.
First call, not exceeding £1 10s. per share, not sooner than three months after allotment.
Further calls, not exceeding £1 10s. per share, at intervals of not less than three months.
DIRECTORS.
CHARLES MOZLEY, Esq., Banker, Liverpool.
JOSHUA PROWSE, Esq., Shipowner, Liverpool.
ALEXANDER SHAND, Esq., Liverpool (Director of the Manchester, Sheffield, and Lincolnshire Railway Company).
THOMAS EKENHEAD LEMON, Esq., Shipowner, Liverpool.
ARTHUR W. LYON, Esq. (Messrs. Edward Lyon and Brothers), Manchester (Director of the Thames and Mersey Marine Insurance Company).
THOS. HUNTER HOLDERNESS, Esq., Liverpool (Director of the Birkenhead and Chester Railway Company).
(With power to add to their number.)
BANKERS.
Messrs. Prescott, Grote, Cave, and Cave, London.
Barned's Banking Company (Limited), Liverpool.
Union Bank (Limited), Manchester.
Yorkshire Banking Company, Leeds.
National Provincial Bank of England, Cardiff.
National Bank of Scotland, Glasgow.
Provincial Bank of Ireland, Ireland.
SOLICITORS—Messrs. Lace, Banner, Littledale, Gill, and Bardswell, Liverpool.
BROKERS—Messrs. Thomas Tinley and Sons, Liverpool.
AUDITORS—Messrs. Harmood Banner and Son, Liverpool.
MANAGERS—Messrs. Robert Girvin and Co.
TEMPORARY OFFICES,—No. 6, WATER STREET, LIVERPOOL.

PROSPECTUS.
The carrying trade between ports within a moderate distance of each other is rapidly changing from sailing vessels to steamers, and has proved highly remunerative to the owners of the latter description of vessels. This company is formed to own a fleet of vessels of a suitable tonnage to embark in the general trade. One of their objects will be to establish a new line of screw steamers, built of iron, of the most approved model, for the conveyance of cargoes in bulk, such as coals, between the coal ports of South Wales and Liverpool, and elsewhere (as early as the necessary arrangements, similar to those in London, can be made for insuring dispatch in the discharge), so as to meet the requirements of the numerous ocean-going steamers frequenting this and other ports. The shipment of coals from South Wales is at present a very large and increasing trade, and when all the ocean steam-ship companies now organised are fairly under way, the quantity required in Liverpool alone will be enormous.
Power is taken to employ the ships of the company in all branches of the carrying trade, foreign and coasting, wherever it should hereafter be thought advisable.
The present mode of bringing coals coastwise (by sailing vessels) to Liverpool is attended with great cost and uncertainty of time of arrivals, and to ensure a constant and ready supply it is necessary to keep a large stock banked, for re-shipment by flats alongside the steamers. With screw colliers a great deal of this labour and expense will be avoided, as they may be generally depended upon as to time of arrival, and going alongside the ocean steamers in the river can discharge direct into them, without the great cost of landing and re-shipment.
It is contemplated to have the colliery boats specially built for the company, on the most approved system, and supplied with ample steam winches, so that the coals may be put on board the ocean steamers with much greater dispatch than at present, and at less cost. Until recently nearly the whole of the coals for the London market was supplied by sailing vessels; now screw steamers have been introduced, and it is well known have been found to be highly remunerative to their proprietors, making a usual profit of 20 per cent. per annum. The General Iron Screw Colliery Company, Newcastle-on-Tyne, paid 40 per cent. for the past year, besides reserving more than that percentage for depreciation and a fund for further operations. The screw collier, *James Dixon*, made 57 voyages from Newcastle-on-Tyne and the adjacent neighbourhood to London within 12 months, delivering in that time 62,842 tons coals, and this with a crew of 21 hands. To accomplish this delivery of coals on the previous system, with sailing colliers, 16 ships and 144 hands would have been required.
The reduction which has recently taken place in the price of labour and materials, by which the steamers can now be built or purchased below the usual cost, makes the present a most favourable time for commencing this company. One steamer has been purchased, and is now employed between Drontheim (Norway) and Newcastle, on highly remunerative terms, and one contracted for by the managers, both of which will be handed over to the company at the original cost price.
The managers take a large interest in the company, and their remuneration is fixed by the Articles of Association to be according to the profits received by the shareholders.
There will be no fee for promotion. The remuneration of the directors will be fixed by the shareholders at the first annual meeting, and the preliminary expenses will be confined to indispensable outlay.
A copy of the Articles of Association lies for the inspection of applicants for shares at the office of the solicitors of the company.
Applications for shares must be sent through the bankers of the company, accompanied with their receipt for £1 per share.
Forms of application for shares may be had from the bankers, brokers, or solicitors of the company.
In case the amount so paid should exceed £2 per share on the number of shares allotted, the surplus will be returned; but if it should fall short, the balance must be paid within seven days after notice of allotment, or in default the allotment will be cancelled and the deposit forfeited. If no allotment be made the deposit will be returned in full.

FORM OF APPLICATION FOR SHARES.
To the Directors of the Channel Steam-ship Company (Limited).
GENTLEMEN,—Having paid to the bankers of the above-named company the sum of £ , I hereby request that you will allot me shares in the said company, and I agree to accept such shares, or any smaller number that may be allotted to me, and to become a member of the company; and I authorise you to place my name on the register of members in respect of the shares to be allotted to me, and I agree to be bound by all the conditions and regulations contained in the Memorandum and Articles of Association of the company. I further authorise you to forward by post to my address as below the certificate for any shares which may be allotted to me.
Name in full .....
Firm (if any) .....
Business or profession .....
Place of business .....
Residence .....
Dated this day of , 1865.

ACCIDENTS TO LIFE OR LIMB, in the FIELD, the STREETS, or at HOME, provided for by a Policy of the RAILWAY PASSENGERS' ASSURANCE COMPANY, 64, CORNHILL, LONDON, E.C.
Compensation has been paid for 10,000 claims.
£1000 in case of Death, or £6 per week while laid up by Injury, secured by An Annual Payment of from £3 to £5 5s.
For particulars apply to the Clerks at the Railway Stations, to the Local Agents, or at the Offices,
64, CORNHILL, and 10, REGENT STREET.
W. J. VIAN, Sec.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL ALBION SILVER-LEAD MINING COMPANY.—By direction of his Honour the Vice-Warden, notice is hereby given, that on the 27th day of September inst., at the Registrar's Office, at Truro, in the County of Cornwall, this Court will PROCEED to MAKE a CALL of TWO POUNDS AND FIFTEEN SHILLINGS PER SHARE on all the contributories of the said company settled under class A. All persons interested therein are entitled to attend at the time and place to offer objections to such call.
HENRY SEWELL STOKES, Solicitor for the Petitioner, Truro.
Dated Registrar's Office, Truro, Sept. 11, 1865.

In Chancery.

FOR SALE, THE THORNLEY AND LUDWORTH COLLIERIES, IN THE COUNTY OF DURHAM.

TO BE SOLD, pursuant to a Decree of the High Court of Chancery, made in a Cause of Gully v. Wood and Others, with the approbation of the Master of the Rolls, in One Lot, by Mr. CHARLES BROUGH, the person appointed by the said Judge, at the Queen's Head Hotel, Pilgrim-street, Newcastle-upon-Tyne, on Tuesday, the 31st day of October, 1865, at Two of the clock in the afternoon precisely, those IMPORTANT, very VALUABLE, and well known current-going sea sale COLLIERIES, called the THORNLEY AND LUDWORTH COLLIERIES, in the county of DURHAM, the property of the Thornley Coal Company, containing, with their associated coal fields, 3728 acres, or thereabouts, together with the COLLIERY PLANT of pits, ENGINE HOUSES, ENGINES, MACHINERY, RAILWAYS, COKE OVENS, screens, stores, MATERIALS, live and dead stock, agents and workmens' houses, workshops, stables, granaries, farms, and farming stock, and all other erections and buildings whatsoever to the same several collieries belonging or appertaining and held therewith.
Particulars, with plan and conditions of sale, may be had gratis, and further information obtained (and all the collieries viewed), on application to Mr. JOSEPH SMITH, jun., viewer, Monkwearmouth; Mr. THOS. BELL, viewer, Thornley Colliery; in London of Messrs. WILLIAMSON, HILL, and Co., No. 10, Great James-street, Bedford-row; Messrs. SHUM and CROSSMAN, 3, King's-road, Bedford-row; Messrs. HORN and MURRAY, No. 7, St. Martin's-place, Trafalgar-square; and Mr. JAMES CROWDY, No. 17, Serjeant's Inn, Fleet-street; also in the country of Mr. THOMAS BELK, solicitor, Hartlepool; Messrs. R. P. and H. PHILLIPSON and Messrs. GRIFFITHS and CRIGHTON, solicitors, Newcastle-upon-Tyne; of the Auctioneer; at the place of sale; and at the principal inns in the counties of Northumberland and Durham.

TO COPPER ROLLER, TUBE, AND PLATE MANUFACTURERS, BROKERS, AND OTHERS.

MESSRS. T. M. FISHER AND SON have received instructions from the Mersey Docks and Harbour Board to SELL BY AUCTION, on Thursday, the 21st instant, commencing at Twelve o'clock at noon, on the premises lately occupied by Messrs. John Bibby, Sons, and Co., as COPPER ROLLING MILLS, SEACOMBE, near BIRKENHEAD, CHESHIRE, the following VALUABLE PLANT, comprising THREE CAPITAL HIGH PRESSURE STEAM BOILERS, each 32 ft. long, 6 ft. diameter, with flue through, stop and feed valves; ONE DITTO DITTO, 34 ft. long, 6 ft. 6 in. diameter, with flue through, 3 ft. 3 in. diameter, safety valves, junction ditto, steam chest, 5 ft. 6 in. by 2 ft. 6 in., pipes, and blow off valves; ONE DITTO DITTO, 28 ft. long, 6 ft. diameter, with flue through, 4 ft. diameter, valves and pipes; ONE DITTO, with egg end, 18 ft. long, 4 ft. 6 in. diameter, with dome, 2 ft. 4 in., safety valve, with spring balance, feed valve, high and lower water gauge and pipes, by J. Jones, Liverpool; ONE CAPITAL CONDENSING BEAM ENGINE, 80-horse power, cylinder 50 in. diameter, 8 ft. stroke, two spur driving wheels, 14 ft. 6 in. by 12 in. by 4½ in., on 16 ft. of cast-iron rib, shaft 14 by 14, eccentric motion, pumps, and governors; cast-iron CONDENSING CISTERN, 8 ft. by 8 ft. by 12 ft., exhaust pipes and valves, by Nevill, Llanelly; ONE CONDENSING BEAM ENGINE, 30-horse power, cylinder 30 in. diameter, 6 ft. stroke, fly-wheel 16 ft. diameter, rim 11 in. by 12 in., with governors, valves, pumps, and pipes, by Nevill; ONE 35-horse HIGH-PRESSURE DITTO, cylinder 22 in. diameter, 4 ft. stroke, fly-wheel 16 ft. diameter, rim 17 in. by 9 in., on 10 ft. of 14 in. cast-iron shaft, with spur driving wheels, 6 ft. 9 in. by 9 in. by 3⅛ in., governors, pumps, and valves, by Nevill; one 12 in. lifting pump, with cast-iron beams and connecting rods; one 8 in. do., with ditto; one 3½ in. ditto ditto, and one 2¼ in. ditto ditto; eleven plate rolling and bar machines, with cast-iron bowls, from 9 ft. to 4 ft. long, 22 in. and 18 in. diameter; two slitting hammers and fixings; nine plate shears, with eccentric motion and driving gear; two circular ditto, to take in 77 in. diameter, and 80 in. traverse, by Nevill; ditto, to take in 48 in. diameter, and traverse 80 in.; 12 cwt. steam hammer, with 8 in. cylinder, 15 in. stroke, regulating screw, check motion, and cast-iron block, by Nasmyth, Patricroft; punching machine and fixings; 39 copper couplings, from 9 in. to 18 in. diameter, and 12 in. on the face; cast-iron engine beds, 28 ft. long, 8 ft. wide; massive spur and bevel gearing; quantity of cast-iron shafting, from 5 in. to 14 in. diameter; quantity of steam and water pipes; wrought iron jib crane, to lift 1 ton; gasometer, 18 ft. diameter, 9 ft. deep, with filters, regulating organ pipes and fire clay retorts; copper boiler, 20 in. diameter, 16 in. deep; and other effects.
May be viewed on Wednesday, the 20th inst., and catalogues had on the premises, or from the auctioneers, 16, Tib-lane, behind the Bank of England, Manchester.

BOSCAWEN MINE, NEAR BLACKWATER, CORNWALL.
TUESDAY, SEPTEMBER 26, 1865.

MR. BURGESS WILL SELL, BY PUBLIC AUCTION, on the above date, at Eleven o'clock in the forenoon, the following MACHINERY and MATERIALS, viz.:—One bright full scantle 70 in. cylinder PUMPING ENGINE, THREE 12 ton BOILERS and fitting; one 20 in. cylinder DRAWING ENGINE, 8 ton BOILER and fittings; STEAM CAPSTAN and CRUSHER; a large quantity of 10, 18, 19, and 20 in. pumps; H pieces, doorpieces, brass lined working barrels, windbores, plunger poles, 2 balance bobs, 2 sets of lofty shears, 2 angle bobs, pitch pine rods, faggotted rod plates and bolts; ¼ in. and 9-16ths chain, a large quantity of 2 ft., 4 ft., and 6 ft. shieves, and flat-rod pulleys; iron and wood flat-rods, bucket rods, bridge and flat rail iron, staples and glands, smiths' bellows, smiths' tools, anvils, and sundry materials.—Dated September 6, 1865.

YARNER COPPER MINE, IN THE PARISH OF BOVEY TRACEY, DEVON.

MESSRS. WARE AND SON WILL SELL, BY AUCTION, on the Mine, on Tuesday, the 3d day of October next, precisely at Two o'clock in the afternoon, all the VALUABLE PLANT, which is now in good working order, together with the INTEREST in the SETT. The PLANT consists of a 60 inch cylinder STEAM ENGINE, with 10 ton BOILER; about 60 fms. of pitwork; TWO WATER WHEELS, and crusher attached; and every other requisite required for the further prosecution of the mine. Satisfactory explanation can be given for the temporary suspension of the workings, and the auctioneers are confident, from various reports, that the above offers a most promising speculation. The ores already sold amount to several thousand tons.
A complete catalogue of the machinery and materials will be prepared, and ready for delivery forthwith, which may be had on application to the auctioneers, Paris-street, Exeter.—Dated Exeter, Sept. 13, 1865.

TO CAPITALISTS, COLLIERY PROPRIETORS, AND OTHERS.
SOUTH WALES—COMPACT MINERAL PROPERTY.

MR. THOMAS THOMAS begs to announce that he has FOR PRIVATE DISPOSAL a very desirable well-timbered FREEHOLD FARM, of about FORTY-THREE ACRES, teeming with MINERALS, there being no less than FIVE VEINS of excellent COAL on the property, besides IRONSTONE and CLAY. It is situate within two and a half miles of an important shipping port, with which arrangements for available railway accommodation are now progressing.
Apply to Mr. THOMAS THOMAS, auctioneer, &c., Neath.

WHEAL FALMOUTH AND SPERRIES MINE, NEAR TRURO, CORNWALL.—FOR SALE, BY PRIVATE CONTRACT, about 70 fms. of 18 and 19 in. pitwork, including pumps, plunger bottoms, strapping plates, &c., complete; also, one excellent cast-iron balance-bob, for an 80 in. engine.—For further particulars, and to treat for the same, apply to the agents, on the mine.
Dated August 30, 1865.

MATERIALS FOR SALE, BY PRIVATE CONTRACT, at EAST MARGARET MINE, LELANT, near the St. Ives Road Station, or about one mile from Hayle:—
A 37 inch CYLINDER PUMPING ENGINE.
A 30 inch CYLINDER STAMPING ENGINE, 8 feet stroke, with 32 heads, complete—a first-class machine; with 9 ton BOILER.
A 20 inch CYLINDER WINDING ENGINE, 4½ ft. stroke—a first-class machine; with 9 ton BOILER; cage and fly-wheel complete.
One 8-arm CAPSTAN complete, 150 fathoms, 8 to 12 inch pitwork, with matching pieces, H-pieces, clack-seat pieces, poles, stuffing-boxes, glands, &c., complete, all in good working condition.
60 fms. 2¾ in., 30 fms. 1⅝ in., and 20 fms. 1⅜ in. iron pump rods; 3 horse whims, complete; 200 fms. ⅜ in. horse whim chain; shaft tackle, with 12 ft. shieve; 2 new 12-ft. shieves; 25 fms. new tram rods; wood and iron tram wagons; large quantity of flange and other bolts, of various sizes and lengths; 2 to 3 tons fagotted iron strapping plates; 4 to 5 tons scrap and old iron; several lots of new iron and steel.
STAMPS' FLOORS.
32 hand and patent frames, with launders and valves complete; 20 26 to 45 in. tin sieves; trunks, buddles, sheds, and dressing tools, complete.
SMITHS' SHOP.
2 36-inch bellows; anvils, vice, screwing stocks, mandrill, smiths' and miners' tools, complete. The account-house furniture, comprising tables, chairs, cooking apparatus, utensils, knives, forks, dinner set, tea set, &c.
For further information, apply to the agents on the mine; or to Messrs. HICKS and Son, Albert Stores, Penzance.—August, 1865.

VALUABLE ENGINES AND OTHER COLLIERY MATERIALS FOR SALE, BY PRIVATE CONTRACT.—A large PUMPING ENGINE, built by the Bowling Iron Company, diameter of cylinder 40 in., stroke 7 ft., beam 24 ft., with air pump, condenser, &c., complete. Also, about 60 yards of 15 in. pumps, with spears, working barrel, &c., complete.
A VERTICAL ENGINE, with gearing for winding and pumping, built by Jos. Butler and Co., Stanningley, diameter of cylinder 14¼ in., stroke 3 ft., fly wheel 10 ft. diameter, with a large quantity of shafting, bellcrank, &c., complete. Also, about 80 yards of 8 in. pumps, with spears, working barrel, &c., complete.
A HORIZONTAL ENGINE, with gearing (very strong) for winding and pumping, built by Davis Brothers, Sheffield, and but little used; diameter of cylinder 30 inches, stroke 61 in., fly wheel 14 ft. diameter, with wrought-iron shafting. Also, valve gear, &c., complete.
A GRASSHOPPER ENGINE, with a lever beam and vibrating pillar; diameter of cylinder 12 in., stroke 3 ft., with fly wheel 11 ft. diameter, and spur gear attached to rope roll for winding, all complete. Also, a BOILER 12 ft. 6 in. long and 7 ft. diameter, plates ¼ in. thick, with mountings, furnace work, &c., complete.
A VERTICAL WINDING ENGINE, with cross head and two connecting rods, spur gear, &c.; diameter of cylinder 14 in., length of stroke 3 ft., with fly wheel 11 ft. diameter, rope roll, &c., complete.
A powerful CAPSTAN or CRAB, suitable for steam power, with frame, all complete; two pairs of 7 fold blocks for sinking, complete; a few lengths of 16 in. pumps; two old boilers, about 4 tons each, one being cut up; about 20 tons of old fish-bellied and longitudinal rails, and about 50 tons of old metal, a large proportion being cold blast.
The engines, &c., may been, or further information obtained, on application to Mr. MUCKLE, Manston Collieries, near Leeds.

ESKDALE, near WHITBY.—The SALE of the UGGLEBARNBY ESTATE, advertised for the 20th of September, is UNAVOIDABLY POSTPONED.—Sept. 11, 1865.

VALUABLE SPANISH SILVER MINES.—ONE-TENTH SHARE IN FEE SIMPLE IN TWELVE LEAD MINES, in the valley of Alcudad, Spain, near the Cuidad Real Railway, reported by competent parties to be capable of producing £60,000 a year, with a capital of £20,000, the bulk of which will be required for steam-pumping machinery, and not before water is reached. The works are at present going on. The present proprietor undertakes to form the concern into an English public company, taking paid-up shares for the whole of the purchase-money, with the exception of a small sum (say, £4000), now raised, and employed for working capital and reserve of shares. A person taking the tenth share will have a return of at least 15 per cent. till the company is formed, and, on the successful formation of the company, will receive back £1600 in cash and £4400 in paid-up shares, which it is confidently expected will pay an enormous dividend. The titles are held under Royal Concession. Price £1600. Principals or their solicitors only may apply, by letter in the first instance, to Mr. E. B. NEILL, Monte Videan Offices, Nos. 2 and 3, Catton-row, Parliament-street.

WHEAL SIDNEY, PLYMPTON.—FOR SALE, BY PRIVATE CONTRACT, the whole of the MACHINERY and MATERIALS, together with the SETT of WHEAL SIDNEY TIN MINE.—To view, apply to Capt. EDWARDS, on the mine; and for further particulars, and to treat, apply to the purser, Mr. C. R. NORTON, Salisbury.

MERIONETHSHIRE MINING SETTS FOR SALE—IRON, SLATE, AND MANGANESE.—Or shares in either of the above, situate near railways. The iron and manganese of rich quality, and abundant at surface. The slate setts near prosperous quarries.—Address letters Mr. G. E. PETERS, Dolgelly.

SLATE QUARRIES, TO BE LET.—ALLT DINAS SLATE QUARRY, situate in the parish of LLANAFANFAWR, in the county of BRECON, ten miles from Builth, five from the intended railway station at Maesecfn-y-ffordd, on the Central Wales Railway, and six from the Mid-Wales Railway at Newbridge-on-Wye.
The slate vein runs up from the river to the top of the mountain to a height of 511 ft., is about half a mile in length, and 200 yards in width. Openings have been made in the vein, and although penetrated only to a few feet from the surface, it produces good slates. The metal and quality of the slate is strong and durable, will bear carriage to any part of the world, and stands the heat necessary for enamelling perfectly.
There is room for tipping rubbish for centuries, and a plentiful supply of water at all times of the year for machinery.
Apply to J. PRATT, Esq., land agent, Crickhowell.

REAL TERRA COTTA CLAY—TO CLAY CONTRACTORS, CLAY AGENTS, AND POTTERY MANUFACTURERS.—A bed of very fine terra cotta clay having been discovered, a sample of it has been submitted to an analysis at the Geological Museum, and the following is the result:—
Metallurgical Laboratory, 28, Jermyn-street, July 4, 1865.
The analysis of the air-dried clay gave as follows:—

Composition per cent.	
Silica	57·83
Alumina	20·55
Peroxide of iron	7·75
Oxide of manganese	traces
Lime	1·68
Magnesia	0·97
Potash	3·37
Soda	0·56
Carbonic acid	0·90
Phosphoric acid	traces
Organic matter (small quantity) / Combined water	4·39
Hygroscopic water	2·13 = 100·63

A copy of the full report, and samples, will be forwarded on application, together with a short description of its varied capabilities.
Tenders, stating price per ton for the same, to be sent to G. J. ALLEN, Esq., Watcombe House, Watcombe, near Torquay, Devonshire.

Royal School of Mines.

ROYAL SCHOOL OF MINES.
DIRECTOR.
Sir RODERICK IMPEY MURCHISON, K.C.B., F.R.S., &c.

During the Session 1865–6, which will commence on the 2d of October, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1. CHEMISTRY	By E. FRANKLAND, F.R.S., &c.
2. METALLURGY	By JOHN PERCY, M.D., F.R.S.
3. NATURAL HISTORY	By T. H. HUXLEY, F.R.S.
4. MINERALOGY / 5. MINING	By WARINGTON W. SMYTH, M.A., F.R.S.
6. GEOLOGY	By A. C. RAMSAY, F.R.S.
7. APPLIED MECHANICS	By ROBERT WILLIS, M.A., F.R.S.
8. PHYSICS	By JOHN TYNDALL, F.R.S.

INSTRUCTION IN MECHANICAL DRAWING, by Rev. J. HAYTHORNE EDGAR, M.A.

The fee for students desirous of becoming associates is £30 in one sum, on entrance, or two annual payments of £20, exclusive of the laboratories.
Pupils are received in the Royal College of Chemistry (the Laboratory of the School), under the direction of Dr. Frankland, and in the Metallurgical Laboratory, under the direction of Dr. Percy.
Tickets to separate Courses of Lectures are issued at £3 and £4 each.
Officers in the Queen's Service, Her Majesty's Consuls, acting mining agents, and managers, may obtain tickets at reduced prices.
Certificated schoolmasters, pupil teachers, and others engaged in education, are also admitted to the lectures at reduced fees.
His Royal Highness the Prince of Wales has granted two Scholarships, and several others have also been established.
For a prospectus and information apply at the Museum of Practical Geology, Jermyn-street, London, S.W. TRENHAM REEKS, Registrar.

MINERALOGY.—KING'S COLLEGE, LONDON.—Prof. TENNANT, F.G.S., will deliver a COURSE OF LECTURES on MINERALOGY, with a view to facilitate the study of GEOLOGY, and the application of mineral substances in the ARTS. The lectures will commence on FRIDAY, October 6, at Nine A.M., and will be continued on each succeeding Wednesday and Friday at the same hour until Christmas. Fee, £2 2s. Another course of LECTURES on MINERALOGY and GEOLOGY will be given on WEDNESDAY evenings, from Eight to Nine. These begin Oct. 11, and will be continued until Easter, 1866. Fee, £1 11s. 6d.
R. W. JELF, D.D., Principal.

Swan Rope Works.

GARNOCK, BIBBY, AND CO., CHAPEL STREET, LIVERPOOL,
MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.
MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER, and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of TRENGTH.

First Class Silver Medal, Royal Polytechnic Society, Falmouth, 1864.

CREASE'S PNEUMATIC TUNNELLING ENGINE, for SUPERSEDING the SLOW and EXPENSIVE USE of MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.
Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.
Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE Tavistock Devon.

MANCHESTER, AND WEST END OF LONDON.
MR. W. HANNAM, MINING, SLATE QUARRYING, INSURANCE, AND GENERAL SHAREBROKER,
ROYAL INSURANCE BUILDINGS, KING STREET, MANCHESTER; and 31, REGENT STREET, LONDON, S.W.
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices.
A Monthly Investment Circular on application.

CAPT. C. WILLIAMS, TYN-Y-WERN, TALIESIN, via SHREWSBURY, has had upwards of 20 years' practical experience in mining, during which time he had the entire management of several English and Welsh mines. Residing in the centre of the CARDIGANSHIRE MINING DISTRICT, and in close proximity to those of MERIONETHSHIRE and MONTGOMERYSHIRE, he OFFERS HIS SERVICES to SURVEY and REPORT UPON ANY MINE.

CAPT. CHARLES WILLIAMS is at all times in a POSITION to FURNISH CAPITALISTS with RELIABLE INFORMATION respecting MINING in NORTH and SOUTH WALES, in which they should embark or avoid. C. WILLIAMS has prepared a list of most of the mines that are likely to pay, and can name two or three that will turn out a great prize.
Tyn-y-Wern, Taliesin, via Shrewsbury, April 18, 1865.

CAPT. J. RABEY OFFERS FOR SALE FIFTY SHARES, at the nett price of £3 per share, in the CAI-R-PANT MINE, joinining the great Minera Mine, and one of the best prospects in the district, being all whole ground, as he mine paying for itself now at the shallow depth of 40 yards.—Address, Captain J RABEY, Coedporth, near Wrexham, Denbighshire, North Wales.

GOVERNMENT SECURITIES, JOINT-STOCK BANKS, RAILWAY DEBENTURES AND BONDS, COLONIAL SECURITIES, FOREIGN BONDS, AND BRITISH MINES.—Messrs. TREDINNICK AND CO., of 78, LOMBARD STREET, LONDON, E.C., may be consulted confidentially as to the eligibility of all *bond fide* investments. A selected list forwarded on application.

MESSRS. TREDINNICK AND CO., STOCK AND SHAREBROKERS, AND DEALERS IN BRITISH MINING SHARES,
78, LOMBARD STREET, LONDON.
"THE CITY HIVE."—A Journal of Commerce, Banking, and Mining. Price 1d.

MR. BRENTON SYMONS INSPECTS and REPORTS on ANY MINERAL PROPERTY. In all cases where procurable a plan will accompany his report.—18, Hatton-garden, E.C.

CLAYTON, SHUTTLEWORTH, AND CO., ENGINEERS,

MANUFACTURERS of PORTABLE and FIXED STEAM ENGINES, MACHINERY for PUMPING, HOISTING, GRINDING, SAWING, &c., ENGINES for STEAM CULTIVATION, SELF MOVING ENGINES for COMMON ROADS and AGRICULTURAL PURPOSES GENERALLY.

STAMP END WORKS, LINCOLN and 78, LOMBARD STREET, LONDON.

ALSO AT

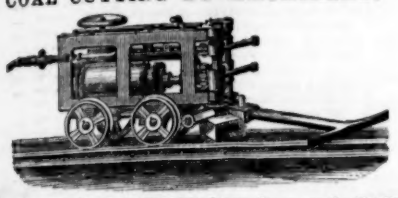
LOWENGASSE No. 44, LANDSTRASTE, VIENNA, and GEGENUBER DEM BAHNHOF, PESTH.

Descriptive, illustrated, and priced catalogues free per post.
SPECIAL DRAWINGS WHEN REQUIRED.
THE BEST STEAM THRASHING MACHINERY MADE. 103

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES. The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE. All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which such INFRINGEMENT is MADE.

COAL CUTTING BY MACHINERY.



MESSRS. RIDLEY AND CO. have, by recently PATENTED IMPROVEMENTS, COMPLETED their TRUNK COAL CUTTING MACHINE, WORKED by COMPRESSED AIR, and are NOW PREPARED to NEGOCIATE for the USE, and to SUPPLY MACHINES, which will be found to COMBINE SIMPLICITY of CONSTRUCTION with PORTABILITY and ECONOMY in WORKING. By the use of these machines a CONSIDERABLE SAVING of COAL is EFFECTED, and the COST of LABOUR MUCH REDUCED. Each machine will be guaranteed as to its capabilities, &c.

All applications to be made to Messrs. RIDLEY and Co., No. 11, South-street, Finsbury, London, E.C.; or Mr. PERCY BANKART, agent, 9, Clement's-lane, E.C.

, COLLIERY PROPRIETORS are CAUTIONED against PURCHASING or USING MACHINES, the construction of which will constitute an INFRINGEMENT of the ABOVE PATENT.

HENRY HUGHES AND CO., FALCON RAILWAY PLANT WORKS, LOUGHBOROUGH,

ENGINEERS, IRONFOUNDERS, BOILER MAKERS, and MANUFACTURERS of EVERY DESCRIPTION of RAILWAY MACHINERY.

LOCOMOTIVE ENGINES, for MINERAL and CONTRACTORS' RAILWAYS, of the best materials and workmanship, always in progress. These engines are designed to supply the chief requisites in tank locomotives—viz., reduction of the overhanging weight at the fire-box end, proper distribution of the weight upon the wheels, and keeping the centre of gravity low. These are accomplished by making the fire-box and its shell on an improved principle, which enables the driving axle to be placed further back without interfering with the eccentrics and valve gear, which are of the usual simple description. LONDON OFFICES, 34, CANNON STREET WEST.

THOMAS TURTON AND SONS,

MANUFACTURERS OF

CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL, BLISTER STEEL, SPRING STEEL, GERMAN STEEL.

FILES MARKED T. TURTON. EDGE TOOLS MARKED WM. GREAVES & SON,

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C., Where the largest stock of steel, files, tools, &c., may be selected from. 107

SALOM'S NEW OPERA and FIELD GLASS, and the RECONNOITERER GLASS, price 10s. 10d., sent free.—This tourist's favourite through extraordinary division of labour, distinctly shows small windows 10 miles off, landscape at 30 miles, Jupiter's moons, &c.—The MARQUIS OF CARMARTHEN: "The reconnoiterer is very good."—The EARL of BREADALBANE: "I find it all you say; and wonderfully powerful for so very small a glass."—Rev. LORD SCARSDALE "approves of it."—LORD GIFFORD, of Ampney: "Most useful."—LORD GARVAGH: "Remarkably good."—Sir DUDLEY CAYLEY, of Brompton: "It gives me complete satisfaction, and is wonderfully good."—Sir W. H. FEILDEN: "I do not think it can be surpassed: it gives great satisfaction."—CAPTAIN SENDEY, Royal Small Arms Factory, Enfield, "found it effective at the 1000 yards range."—F. H. FAWKES, of Farnley Hall, Esq.: "I never before, although I have tried many, met a glass combining so much power for its size with so much clearness."—*The Field:* "We have carefully tried it at an 800-yard rifle range, and found it fully equal to any of those present, although they had cost more than four times its price."—*Notes and Queries:* "What intending tourist will now start without such an indispensable companion?" The celebrated HYTHE GLASS shows bullet-marks at 1200 yards, and men at 3¼ miles; price, 31s. 6d. All the above glasses, respectively bearing the registered trade marks, "Salom," "Reconnoiterer," and "Hythe," are only to be had direct from SALOM and Co., 98, Princes-street, Edinburgh. A few hours will carry a glass to almost the remotest town in the United Kingdom.
No agents of any kind anywhere. 108

Price 1s., by post 1s. 2d.,
SLATE QUARRIES AS AN INVESTMENT.
By JOHN BOWER, Esq., D.C.L., Barrister-at-Law, Managing Director of the Snowdon Slate Quarries Company (Limited).
London: Published at the MINING JOURNAL office, 26, Fleet-street, E.C., and sold by all booksellers and newsagents. 109

THE HARDWARE WEEKLY MESSENGER.
CHARLES RYLAND AND SONS' IRON TRADE CIRCULAR AND HARDWARE WEEKLY MESSENGER.
The "Iron Trade Circular" is eminently the business journal of the mining districts and the manufacturers and wholesale dealers in iron. Its information is authentic, unbiassed, and complete, comprising not only the business news of the South and North Staffordshire district, but generally of the entire mining and manufacturing districts of the United Kingdom. It is now proposed to add a collection of special and general information in the interests of the Hardware Trades of Birmingham, Sheffield, and London, to be comprised in a department of the "Iron Trade Circular,' under the head of "The Hardware Weekly Messenger." Subscription:—

One year (post free)	£2 2 0
Half-year (post free)	1 1 0
Quarter of a year (post free)	0 10 6

Payable in advance.
Advertisements and orders to be addressed Union-passage Birmingham.
CHARLES RYLAND AND SONS, Iron and Metal Brokers. 110

THE STOCKTON AND HARTLEPOOL MERCURY AND MIDDLESBOROUGH NEWS (published at Hartlepool) is eminently the organ of the Coal, Iron, and Iron Ship-building Trades in the extensive Mining and Maritime District of South Durham and Cleveland, with which it has been closely identified since its origin. The "Mercury" was for years the only newspaper published in South Durham and Cleveland, and is yet the only one published more than once a week. Advertisements to be forwarded to the publisher, Mr. JOHN H. BELL, Southgate, Hartlepool. 111

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764).
Published every Saturday, price 2d., or quarterly 2s. 2d
THE DAILY CHRONICLE AND NORTHERN COUNTIES ADVERTISER.
Published every morning, price 1d.
Offices, 42, Grey-street, Newcastle-upon-Tyne; 50, Howard-street, North Shields; 195, High-street, Sunderland. 112

NICHOLLS, WILLIAMS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK of EVERY DESCRIPTION.

ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, WILLIAMS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.

Messrs. NICHOLLS, WILLIAMS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices. 113

FOR SALE, a ROTARY COMBINED STEAM ENGINE, 38 in. and 20 in. cylinders, with a 10 ton FLY WHEEL and 8 ton BOILER; 18 heads stamps (complete) and pumping gear attached, near the Tavistock Railway; a nearly new 10 ton BOILER, conveniently situated for shipment; a powerful CORNISH CRUSHER, in good condition; a number of pumps of various sizes, and many other second-hand materials too numerous to mention; also a very good second-hand 11 in. rope.
NICHOLLS, WILLIAMS, AND CO.

P.S.—Manufacturers of Steam Engines, Boilers, Pump Work, Hammered Iron, Chains, and every description of Mining Materials. Foreign Mines supplied with Machinery of all sorts, and steady engineers to erect the same.
Bedford Ironworks and Steam Hammer Mills, Tavistock, Sept. 11, 1865. 114

PATENT FLEXIBLE TUBING AND BRATTICE CLOTH FOR MINES,
MANUFACTURED BY
ELLIS LEVER,
PATENTEE,
WEST GORTON WORKS, MANCHESTER. 115

TAVISTOCK IRONWORKS AND STEEL ORDNANCE COMPANY (LIMITED).
(LATE GILL AND CO.)
ENGINEERS, IRON AND BRASS FOUNDERS,
MANUFACTURERS OF
STEAM ENGINES, BOILERS, AND MACHINERY OF ALL KINDS. CHAINS, SHOVELS, EDGE TOOLS, AND EVERY DESCRIPTION OF CAST AND HAMMERED IRON FOR MINING, MANUFACTURING, RAILWAY, OR AGRICULTURAL PURPOSES.
Machinery sent to all parts of the world.
Foreign mining companies supplied on liberal terms. 116

RAILWAY CARRIAGE COMPANY (LIMITED),
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER. 117

THE METROPOLITAN RAILWAY CARRIAGE AND WAGON COMPANY (LIMITED),
SALTLEY WORKS, BIRMINGHAM.
Successors to Messrs. JOSEPH WRIGHT and SONS.
MANUFACTURERS of RAILWAY CARRIAGES, WAGONS, and RAILWAY IRONWORK of every description.
RAILWAY CARRIAGES and WAGONS built for CASH, or upon DEFERRED PAYMENTS EXTENDING over a period of from THREE to TEN YEARS.
A large number of COAL, IRONSTONE, BALLAST, and other WAGONS to be LET ON HIRE.
MANUFACTORY AND CHIEF OFFICES—SALTLEY WORKS, BIRMINGHAM.
LONDON OFFICES—No. 8, ADAM STREET, ADELPHI, W.C. 118

THE BEVERLEY IRON AND WAGON COMPANY (LIMITED).
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, WROUGHT and CAST IRON CARRIAGE and WAGON WHEELS, AXLES, HAMMERED USES, and HEAVY SMITHS' WORK for ENGINEERS, &c. BRASS and IRON FOUNDERS. MAKERS of PORTABLE FARM RAILWAYS, TURNTABLES, CROSSINGS, SWITCHES, &c. AGRICULTURAL MACHINISTS. MANUFACTURERS of FIELD, ROAD, and BARN IMPLEMENTS, PATENT LORRY, CART, and CARRIAGE WHEELS, with WOOD or IRON NAVES. REAPING MACHINES, CLOD CRUSHERS, CORN MILLS, &c. SAW MILL PROPRIETORS. GENERAL TIMBER CONVERTERS for HOME and FOREIGN RAILWAYS, STATIONS, BARRACKS, EXHIBITIONS, &c.
IRONWORKS, BEVERLEY, YORKSHIRE.
JAMES DEWHIRST, Sec. 119

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
WAGON WORKS,—SMETHWICK, BIRMINGHAM. 120

BIRMINGHAM WAGON COMPANY (LIMITED).
NOTICE OF REMOVAL.
The OFFICES of the ABOVE COMPANY have been CHANGED from No. 3, Newhall-street, Birmingham, to the WAGON WORKS of the company at SMETHWICK.
EDMUND FOWLER, Sec.
Wagon Works, Smethwick, Birmingham, September 13, 1865. 121

LOCOMOTIVE, PORTABLE, and FIXED HORIZONTAL STEAM ENGINES, all sizes up to 24 in. cylinder, PUMPING and WINDING GEAR, MORTAR MILLS, SAW BENCHES, PORTABLE CRANES, &c., FOR SALE or HIRE.
ISAAC W. BOULTON, ASHTON-UNDER-LYNE. 122

HORIZONTAL ENGINES FOR SALE, at very low prices:—One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place Laurence Pountney-hill Cannon-street E.C. 123

IMPROVED APPLICATION OF WATER-POWER.
THE TURBINE.—MAC ADAM BROTHERS AND CO., ENGINEERS, SOHO FOUNDRY, BELFAST, have been engaged for 12 years, with complete success, in MANUFACTURING their IMPROVED TURBINES, and can recommend them with confidence.
This machine is applicable to all practicable heights of fall and quantities of water, giving a much higher percentage of power than any other description of water-wheels.
On low falls it has the additional advantage of not being affected by floods or back-water, and it is particularly well adapted for any falls where the quantity of water is variable.
Further particulars on application, also references to turbines now at work on a great variety of falls. 124

NOBEL'S PATENT BLASTING OIL (NITRO-GLYCERINE).
RAPID COMPLETING OF BLASTING OPERATIONS—PERFECT SECURITY IN STORING AND CHARGING—TAMPING WITH WATER OR LOOSE SAND—GREAT SAVING IN LABOUR—viz.:

If the blasting of a certain quantity of rock requires 1000 feet of 1 inch boring, at 4d. per foot	£1	13	4	
And 15 lbs. of gunpowder, at 5d. per lb.	0	6	3	= £1 19 7
We effect the same work with 10 ft. of 1 in. boring, at 4d. per foot	£0	3	4	
And 1½ lbs. of nitro-glycerine, at 3s. per lb.	0	4	6	= 0 7 10
Showing a saving of				£1 11 9

COPY OF REPORT.
Royal Cornwall Polytechnic Society, Falmouth, Sept. 1, 1865.
THIRTY-THIRD ANNUAL EXHIBITION.—The judges consider Mr. Nobel's nitro-glycerine a very valuable explosive agent, possessing enormous power, and in addition the great advantage of not exploding except when confined. The small space which it occupies in proportion to its power renders it necessary to drive only one hole for the removal of immense masses of rock, thereby effecting a great saving of labour. As far as they can judge, the increase of power, as compared with gunpowder, will enable it to be used at as small a cost. The judges saw a wrought-iron anvil of about 3 cwts. blown to pieces with a charge less than 1 ounce in a three-quarter of an inch hole; and with a charge of 4 lbs. from 40 to 50 tons of rock was completely scattered, and the surrounding rock rent in all directions. It was computed that had the hole been less in diameter the same effect would have been produced, with a much smaller charge. They have much pleasure in awarding a first silver medal. (Signed) S. HODGES, Secretary.
To Mr. C. F. CUSEL, 64, Wood-street. 125

BLASTING.
AS NOW ADAPTED BY LENK'S PROCESS
GUNCOTTON
IS THE CHEAPEST AND SAFEST EXPLOSIVE, AND FREE FROM SMOKE.
Prices and directions for use on application to the Manufacturers,
THOMAS PRENTICE AND CO.,
173, FENCHURCH STREET, LONDON, E.C.
MANUFACTORY, STOWMARKET, SUFFOLK. 126

THE CLUTCH SAFETY CAGE, IMPROVED.—The improvement consists in its having only a single spring, which is strong enough to take the lift of the loaded cage; to overhaul the broken rope, however distant the fracture may be; and yet so conditioned that it cannot bring the clutches into play till the rope is broken. It is an ordinary carriage spring, and can be replaced, when needed, at any coach-work. Makers of cages, or inventors, who may wish to combine the safety clutch with their own improvements are respectfully informed that liberty to do so will be granted to them on easy terms.—Apply to the patentee, ROBERT ALTHOUS 3, Fettes-row, Edinburgh. 127

CHARLES DAVEY AND CO.,
SAFETY FUSE MANUFACTURERS,
ST. HELEN'S JUNCTION, LANCASHIRE. 128

International Exhibition, 1862—Prize Medal.

JAMES RUSSELL AND SONS (the original patentees and first makers of wrought-iron tubes), of the CROWN PATENT TUBE WORKS, WEDNESBURY, STAFFORDSHIRE, have been AWARDED a PRIZE MEDAL for the "good work" displayed in their wrought-iron tubes and fittings.
Warehouse, 81, Upper Ground-street, London, S. 129

BICKFORD'S PATENT SAFETY-FUSE OBTAINED the PRIZE MEDALS at the ROYAL EXHIBITION of 1851, at the INTERNATIONAL EXHIBITION of 1862, in London, and at the IMPERIAL EXPOSITION, held in Paris, in 1855.

BICKFORD, SMITH, AND CO., TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK. 130

BASTIER'S PATENT CHAIN PUMP, APPARATUS FOR RAISING WATER ECONOMICALLY, ESPECIALLY APPLICABLE TO ALL KINDS OF MINES, DRAINAGE, WELLS, MARINE, FIRE, &c.

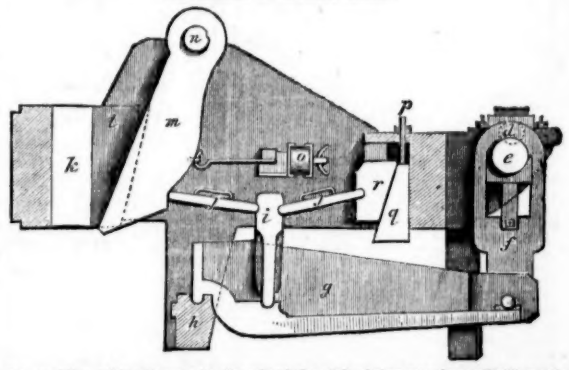
J. U. BASTIER begs to call the attention of proprietors of mines, engineers, architects, farmers, and the public in general, to his new pump, the cheapest and most efficient ever introduced to public notice. The principle of this new pump is simple and effective, and its action is so arranged that accidental breakage is impossible. It occupies less space than any other kind of pump in use, does not interfere with the working of the shafts, and unites lightness with a degree of durability almost imperishable. By means of this hydraulic machine water can be raised economically from wells of any depth; it can be worked either by steam-engine or any other motive power, by quick or slow motion. The following statement presents some of the results obtained by this hydraulic machine as daily demonstrated by use:—

1.—It utilises from 90 to 92 per cent. of the motive power.
2.—Its price and expense of installation is 75 per cent. less than the usual pumps employed for mining purposes.
3.—It occupies a very small space.
4.—It raises water from any depth with the same facility and economy.
5.—It raises with the water, and without the slightest injury to the apparatus, sand mud, wood, stone, and every object of a smaller diameter than its tube.
6.—It is easily removed, and requires no cleaning or attention.

BASTIER'S PATENT CHAIN-PUMP may be seen daily in operation at Messrs. SAMUEL BERGER AND CO.'s Patent Rice Starch Works, Bromley-by-Bow, London, E. Cards of admission to be had on application to the inventor and patentee, Mr. J. U. BASTIER, C.E., 142, Gower-street North, London.

J. U. BASTIER, sole manufacturer, will CONTRACT to ERECT his PATENT PUMP at HIS OWN EXPENSE, and will GUARANTEE IT FOR ONE YEAR, or will GRANT LICENSES to manufacturers, mining proprietors, and others, for the USE of his INVENTION.
OFFICES, 142, GOWER STREET NORTH, LONDON.
London, March 21, 1859. Hours from Ten till Four. J. U. BASTIER C.E. 131

BLAKE'S PATENT STONE BREAKER, OR ORE CRUSHING MACHINE,
FOR REDUCING TO SMALL FRAGMENTS ROCKS ORES, AND MINERALS OF EVERY KIND.



It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England.
The above section illustrates Blake's Stone Breaker, just as made the last five years and is fully protected in every part by patents.
Extract from Specification:—A short but powerful vibration is imparted to one or both of the jaws by any convenient arrangement, and combination of powerful levers, worked by a crank or eccentric on the main shaft.
LEGAL PROCEEDINGS will be taken at once against any person or persons found making, using, or vending any machine, the construction of which will constitute an infringement on the above patent. Read extracts of testimonials:—
Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.
Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably crushing the hardest stones and quartz. WM. DANIEL.
Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine road metal, free from dust.
Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.
Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton. JOHN LANCASTER.
Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS
General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or £75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS
For circulars and testimonials, apply to—
H. R. MARSDEN, SOHO FOUNDRY
MEADOW LANE, LEEDS.
Only maker in the United Kingdom. 132

ASSAYS AND ANALYSES.—MR. JOSEPH GREEN, for the past 14 years professional assayer to the Chester Goldsmiths' Company, UNDERTAKES the ASSAYING and ANALYSIS of EVERY DESCRIPTION of MINERAL.—Assay Office, Chester. 133

CLEVELAND'S WALNUT POMADE—IN CHANCERY—CAUTION.—Cleveland *v.* Heild, Cleveland *v.* Norton. Whereas a bill praying for an injunction restraining the defendants from pirating the plaintiff's labels and selling colourable imitations of his pomade, under the name of "Walnut Extract," has been filed, and an interim order granted by Vice-Chancellor Stuart; all parties are hereby warned that they will be prosecuted found selling colourable imitations aforesaid.
JAMES GRAYSON, 13, Great Ormond-street, Plaintiff's Solicitor.
Barclay, 95, Farringdon-street, agent for Cleveland's Walnut Pomade, and all chemists. 134

GREY HAIR.—CLEVELAND'S WALNUT POMADE will change grey hair to the original colour, darken red or light hair without staining the skin. It is not a dye, and does not injure the hair as dyes do. It gives it a rich glossy appearance, and nourishes its growth. As an ordinary pomade it is superior to all others, and although established 20 years no one has equalled although many have attempted to imitate it. Sold in pots at 1s. 6d., 2s. 6d., and 3s. 6d., by all the London chemists and perfumers.—Barclay, 95, Farringdon-street, wholesale agent. In ordering, order "Cleveland's." 135

GREY HAIR AND BALDNESS.—LANARDO'S AMMONIACAL POMADE will change grey hair to its original colour, gradually darken red or light hair, and effectually remove baldness. Before purchasing send one stamp, and learn its chemical properties. Sold in sample pots at 1s., and ordinary at 5s., 10s., and 21s.—G. Sutton and Co., chemists, Store-street, Bedford-square. 136

FAIR SKIN.—CLEVELAND'S SKIN POWDER gives to the complexion, arms, and all parts of the body a rich delicate appearance, cools, strengthens, and stimulates the skin to a healthy action. In packets at 6d., 1s., and 2s. 6d. Order Cleveland's skin powder of your chemist or perfumer, and don't take any other.—Barclay, 95, Farringdon-street, wholesale agent. 137

EPILEPSY, FITS, and NERVOUS DISEASES yield to the new chemical, PERCHLORATE OF POTASSA, which acts by oxydising the blood and strengthening the vitality of the nerves. An entirely new chemical, discovered, introduced, and extensively prescribed by the late Dr. M. Hall; it acts as an alterative, exhilarant, and stimulating tonic, supplying the blood with oxygen, and is now of universal repute. Try one bottle. Sold at 4s. 6d., 11s., and 22s., by Barclay, 95, Farringdon-street. Order Dr. Hall's perchlorate of potassa. 138

NEW MEDICAL GUIDE.
DR. SMITH, who has had twenty years' practical experience in the treatment of Debility, Spermatorrhœa, Disorders of the Nervous System, &c., has published A GUIDE (138 pages) for Self-Cure. Sent to any address on receipt of two stamps. Dr. SMITH may be consulted personally (or by letter) in all private and confidential cases.—Address, SMITH and Co., 8, Burton-crescent, Euston-road, London W.C. Consultations daily from Eleven to Five. 139

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per Share.	Last paid
1300	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	..	11 3 0	0 15 0	—Dec. 1864
4000	Bedford United (copper), Tavistock†	2 6 8	—	..	13 11 6	0 2 6	—Oct. 1861
1248	Boscaswell (tin, copper), St. Just	6 15 0	—	..	1 5 0	0 5 0	—May, 1864
300	Botallack (tin, copper), St. Just	91 5 0	—	..	483 15 0	3 0 0	—Aug. 1865
10000	British Slate Company [L.]	7 0 0	—	..	9 per cent.		—Aug. 1865
1600	Brixham Hematite Iron [L. £8]	6 7 6	—	..	0 4 0	0 0 6	—Nov. 1864
1000	Bronfloyd (lead), Cardigan [L. £15]	12 0 0	—	..	6 15 0	0 10 0	—July, 1865
1200	Bryn Gwyn (lead), Mold, [L.]	9 0 0	—	..	3 3 6	0 13 6	—Aug. 1865
916	Cargoll (silver-lead), Newlyn	15 5 7	32	..	11 15 0	1 0 0	—Aug. 1865
1 900	Carn Brea (copper, tin), Illogan	15 0 0	—	..	280 10 0	2 0 0	—June, 1864
2880	Clifford Amalgamated (cop.), Gwen	30 0 0	18½	17½ 18½	35 6 0	0 10 0	—June, 1865
2000	Copper Miners of England	25 0 0	—	..	7½ per cent.		—Half-yrly.
40000	Ditto ditto (stock)	100 0 0	—	..	1 per cent.		—Half-yrly.
867	Cwm Erfin (lead) Cardiganshire [L.]	7 10 0	—	..	16 18 0	1 0 0	—June, 1865
128	Cwmystwith (lead), Cardiganshire*	60 0 0	—	..	288 10 0	5 0 0	—July, 1865
280	Derwent Mines (sil.-lead), Durham	300 0 0	—	..	159 10 0	7 10 0	—June, 1864
1024	Devon Gt. Con. (cop.), Tavist.* [S.E.]	1 0 0	—	..	981 0 0	9 0 0	—July, 1865
358	Dolcoath (copper, tin), Camborne*	128 17 6	—	..	800 10 0	4 0 0	—Aug. 1865
512	East Basset (cop.), Redruth [S.E.]*	29 10 0	25½	25 26	126 0 0	1 0 0	—Nov. 1864
6000	East Carn Brea (copper), Redruth	3 15 0	6	5¼ 6	0 5 0	0 5 0	—June, 1865
6144	East Caradon (copper), St. Cleer [S.E.]	2 14 6	13	11 11½	13 12 0	0 10 0	—July, 1865
300	East Darren (lead), Cardiganshire*	32 0 0	—	..	107 10 0	2 0 0	—Aug. 1865
128	East Pool (tin, copper), Pool, Illogan	24 5 0	430	..	369 10 0	4 0 0	—June, 1864
5000	East Rosewarne (cop., tin), Gwinear	2 15 0	2½	2 2¼	0 7 0	0 2 6	—May, 1865
3800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	..	67 0 0	1 0 0	—May, 1865
5000	Frank Mills (lead), Christow	3 18 6	6½	6¼ 6¾	2 13 6	0 6 0	—Aug. 1865
18000	Great Laxey (lead), Isle of Man [L.]	4 0 0	22½	20 21 xd.	3 5 0	0 14 0	—Sept. 1865
5908	Great Wh. Vor (tin, cp.), Helston [S.E.]	40 0 0	36	35 36	6 19 6	0 17 6	—June, 1865
119	Great Work (tin), Germoe	100 0 0	—	..	15 0 0	5 0 0	—Aug. 1864
1024	Herodstoot (ld.), near Liskeard [S.E.]	8 10 0	40	38 39	33 5 0	1 15 0	—June, 1865
400	Lisburne (lead), Cardiganshire, Wales*	18 15 0	—	..	435 10 0	3 0 0	—Aug. 1865
2000	Maes-y-Safn (lead) [L]	20 0 0	—	..	1 0 0	1 0 0	—Oct. 1864
9000	Marke Valley (copper), Caradon	4 10 6	—	.. 3¾ 4¼	3 2 6	0 2 0	—July, 1865
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—	..	0 8 0	0 2 0	—June, 1865
1800	Minera Mining Co. [L.], (ld.), Wrexham	25 0 0	9	..	181 18 0	6 15 0	—Aug. 1865
20000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	19	.. 17	19 2 10	0 16 1	—Jan. 1865
40000	Mwyndy (iron ore) [L. £4] [S.E.]	2 10 0	—	..	0 4 0	0 2 0	—April, 1864
250	Nanty Mines (lead), Montgomery	20 0 0	—	..	7 0 0	1 0 0	—June, 1864
6000	New Birch Tor and Vitifer Cons. (tin)	1 6 6	—	.. 1¼ 2	0 11 0	0 1 6	—Oct. 1864
5936	North Treskerby (copper), St. Agnes	1 9 0	2½	2¼ 2½	0 13 0	0 2 6	—Feb. 1864
202	Parys Mines (copper), Anglesey [L.]	50 0 0	—	..	147 0 0	5 0 0	—Aug. 1865
1129	Providence (tin), Uny Lelant† [S.E.]	10 6 7	33	.. 32 34	78 7 6	1 2 6	—Aug. 1865
30	Silver Rake Mining Company	280 0 0	—	..	—	2 10 0	—Dec. 1864
512	South Caradon (cop.), St. Cleer* [S.E.]	1 5 0	—	..	490 10 0	7 0 0	—July, 1865
4000	St. Day United (tin), Redruth	1 0 0	—	..	0 5 0	0 5 0	—Mar. 1864
6000	Tincroft (cop. tin), Pool, Illogan [S.E.]	9 0 0	18	.. 17 18	17 1 0	0 10 0	—June, 1865
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	..	26 14 0	0 5 0	—July, 1865
3000	W. Chiverton, (ld.), Perranzabuloe [S.E.]	—	—	75 .. 70 75	6 15 0	1 5 0	—Aug. 1865
256	West Damsel (copper), Gwennap	38 10 0	—	..	53 10 0	1 0 0	—Nov. 1864
400	W. Wh. Seton (cop.), Camborne [S.E.]*	47 10 0	170	..	437 0 0	4 0 0	—Aug. 1865
512	Wheal Basset (copper), Illogan* [S.E.]	5 2 6	80	..77½ 82½	611 0 0	1 10 0	—Aug. 1865
1024	Wheal Friendship (copper), Devon	20 0 0	—	..	296 10 0	1 0 0	—May, 1865
512	Wheal Jane (silver-lead), Kea	3 10 0	—	..	15 0 0	0 10 0	—Aug. 1864
4295	Wheal Kitty (tin), St. Agnes	5 4 6	—	..	2 11 6	0 2 6	—Aug. 1865
1024	Wh. Mary Ann (ld.), Menheniot [S.E.]	8 0 0	5	.. 4½ 5½	59 17 6	0 10 0	—Mar. 1865
100	Wheal Mary (tin), Lelant	36 2 6	—	..	288 5 0	4 0 0	—Mar. 1864
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—	..	343 3 0	5 0 0	—May, 1864
396	Wheal Seton (tin, copper), Camborne	58 10 0	200	..192½ 197½	206 15 0	5 0 0	—Aug. 1865
1040	Wh. Trelawny (sil.-ld.), Liskeard [S.E.]	5 17 0	18	.. 17 18	52 12 6	0 12 6	—Sept. 1865
7000	Wicklow (copper) [L.], Wicklow	2 10 0	14½	.. 13¾ 14	15 3 0	0 6 0	—May, 1865

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscean (tin), St. Just	20 10 0	—	..	36 10 0	1 0 0	—Mar. 1862
256	Condurrow (cop., tin), Camborne	76 10 0	90	..	85 0 0	2 0 0	—June, 1852
2450	Cook's Kitchen (copper), Illogan	18 18 9	9	.. 7¾ 8¼	1 7 0	0 7 0	—May, 1867
1024	Copper Hill (copper), Redruth	12 0 0	—	..	2 7 6	—	—Sept. 1862
1055	Craddock Moor (copper), St. Cleer	9 1 0	—	..	7 12 0	0 4 0	—June, 1865
4076	Devon and Cornwall (cop.), Tavistock	6 6 3	—	..	0 10 0	0 2 6	—Feb. 1859
12800	Drake Walls (tin, copper), Calstock	2 1 0	—	.. ¼ ¾	0 18 0	0 1 6	—May, 1863
3000	Dyfngwm (lead), Wales	12 6 6	—	..	0 17 6	0 2 6	—Jan. 1863
1906	East Wheal Lovell (tin), Wendron	3 9 0	13½	..14½ 14¾	1 10 0	0 16 0	—May, 1864
940	Foway Consols (copper), Tywardreath	4 11 6	—	..	41 9 3	0 2 6	—June, 1860
6000	Great South Tolgus (copper), Redruth	0 14 6	1¾	.. 1¼ 1¾	7 18 6	0 5 0	—Dec. 1861
10240	Gunnislake (Clitters' Adit) (copper)	0 2 0	—	..	0 3 0	0 1 6	—Mar. 1862
160	Levant (copper, tin), St. Just	2 10 0	—	..	1091 0 0	5 0 0	—May, 1860
640	Mount Pleasant (lead), Mold	4 0 0	—	..	18 18 1	0 7 6	—Aug. 1862
5000	Orsedd (lead), Flintshire	0 0 8	—	..	0 10 4	0 0 8	—Mar. 1862
1772	Polberro (tin), St. Agnes	15 0 0	—	..	7 19 6	0 10 0	—Nov. 1863
512	Polbreen (tin), St. Agnes	8 0 0	—	..	1 0 0	1 0 0	—July, 1863
6000	Rosewall Hill and Ransom United	3 6 0	—	..	0 10 0	0 1 6	—June, 1863
512	South Tolgus (cop.), Redruth	8 0 0	13	..	74 10 0	1 0 0	—May, 1863
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 18 9	15	.. 16 18	370 13 6	1 0 0	—Nov. 1863
280	Spearne Moor (tin, copper), St. Just	3 17 9	—	..	9 15 0	1 0 0	—June, 1862
940	St. Ives Consols (tin), St. Ives	8 15 0	—	..	490 10 0	0 10 0	—May, 1864
572	Trelyon Consols (tin), St. Ives	15 10 0	—	..	7 0 0	0 10 0	—Sept. 1864
1000	Trumpet Consols (tin), near Helston	11 10 0	—	..	11 0 0	2 0 0	—Mar. 1860
4200	Vigra and Clogau (copper) [L. £5]	5 0 0	—	..	6 2 6	1 10 0	—Mar. 1864
1024	West Caradon (cop.), Liskeard [S.E.]	11 0 0	9½	.. 8 9	101 1 3	0 10 0	—Oct. 1862
1000	Wheal Basset and Grylls (tin)	7 0 0	—	..	3 0 0	0 10 0	—Oct. 1863
1024	Wheal Kitty (tin), Uny Lelant [S.E.]	3 0 6	7½	.. 8 9	10 2 6	0 7 6	—July, 1864
896	Wheal Margaret (tin), Uny Lelant	13 17 6	—	..	76 5 0	1 0 0	—May, 1863
2044	Wheal Tremayne (tin), Gwinear	6 11 3	—	..	6 1 3	0 5 0	—Nov. 1863
6400	West Foway Consols (tin and copper)	7 10 0	—	..	0 19 0	0 3 0	—May, 1862
8000	Wharfedale Mining Company [L. 10s.]	0 5 6	—	..	—	0 0 6	—Jan. 1864

FOREIGN DIVIDEND MINES.

2464	Burra Burra (cop.), South Australia	5 0 0	—	..	320 0 0	5 0 0	—Sept. 1864
15000	Cape Copper Mining [L. £10] [S.E.]	7 0 0	11	.. 10¾ 11	2 2 6	0 17 6	—June, 1865
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	22	.. 20 22	101 0 0	1 0 0	—Jan. 1865
70000	English and Australian	5 0 0	—	..	1 12 0	0 2 0	—Aug. 1864
15000	East Indian Coal, Calcutta [L.]	10 0 0	—	..	7½ per cent.		— Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	—	.. 2½ 3½	0 14 4	0 3 0	—Dec. 1864
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	20 0 0	23	.. 21 23	21 10 0	1 0 0	—June, 1864
68000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	.. ⅜ ⅝	0 12 0	0 1 0	—June, 1864
15000	Linares (lead), Spain [L.] [S.E.]	3 0 0	—	..	11 6 4	0 5 0	—Jan. 1865
10000	Lusitanian (Portugal) [S.E.]	2 0 0	—	..	1 7 0	0 3 0	—June, 1865
9275	New Wildberg (copper)	2 0 0	—	..	0 10 0	0 10 0	—Aug. 1864
50000	Panucillo (copper) [L. £4] [S.E.]	3 0 0	4½	.. 3¾ 4¼	10 per cent.		— Yearly.
10000	Pontgibaud (sil.-lead), France [S.E.]	20 0 0	9	..	2 3 0	0 16 0	—Dec. 1864
97500	Port Phillip (gold), Clunes [S.E.]	1 0 0	1½	.. 1 1¼	0 13 6	0 1 0	—July, 1865
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	43	.. 40 42	63 15 0	2 10 0	—June, 1864
43174	United Mexican (sil.), Mexico [S.E.]	28 5 0	3¼	.. 3 3½	2 19 0	0 5 0	—Sept. 1864
10000	Vancouver (coal) [L. £10]	—	—	..	0 15 0	0 5 0	—Nov. 1864
50000	Victoria (London) [L.] [25000 £1 pd., 25000 7s. 6d. pd.]			..	5 per cent.		—
40000	West Canada Mining Co. [L.] [S.E.]	1 0 0	—	..	0 19 6	0 2 6	—May, 1865

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Alten and Quenangen Uni. (cop.) [L. £5]	4 10 0	—	..	4 5 0	0 15 0	—Nov. 1863
20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	..	0 1 0	0 1 0	—Dec. 1863
4000	Central American (silver) [L.]	5 0 0	—	..	4 6 8	0 14 10	—Dec. 1863
10000	Copiapo Mining Company, Chili [S.E.]	16 0 0	—	..	6 18 0	0 10 0	—Nov. 1862
100000	Don Pedro No. Del Rey [L. £1] [S.E.]	0 14 0	—	.. ¾ 1	0 0 9	0 0 9	—Dec. 1863
103815	Mariquita and New Granada [S.E.]	1 0 9	—	.. ⅛ ⅛	0 9 6	0 1 6	—July, 1859
45000	Yudanamutana (cop.), S.A. L. [S.E.]	3 0 0	—	1¼ .. 1⅛ 1⅜	0 5 0	0 5 0	—Aug. 1863

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos (lead), Spain] L. £2] [S.E.]	1 10 0	..	1¾ .. 1⅛ 1¾	..April, 1865
100000	Anglo-Brazilian (gold) [L. £1] [S.E.]	0 6 0	—	..	..Dec. 1863
20000	Bearix Tin Streaming Company [L. £1]	0 17 6	—	..	..Oct. 1863
25000	Capula (silver), Mexico [L. £2] [S.E.]	1 5 0	—	..	..Feb. 1864
10000	Copiapo Smelting [L.], Chili	10 0 0	—	..	..Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	..	..Fully paid.
50000	East del Rey (gold), Brazil [L. £3] [S.E.]	2 5 0	..	1½ .. 1⅝	..April, 1865
15000	El Chico Silver Mining and Reduction Company [L. £5]	4 0 0	—	..	..Aug. 1865
8000	English and Canadian Mining Company [L.]	5 0 0	—	..	..Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	..	..Fully paid.
50000	Frontino and Boltvia (gold), New Granada [L. £2] [S.E.]	1 0 0	..	3¾ .. 4⅛ 4⅜	..Mar. 1865
10000	Gonnesa (lead) [L.] [5000 £5 paid, 5000 £1 paid]	—	—	..	..May, 1865
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	—	..	..June, 1862
10000	Great Barrier Land, Mining, &c., New Zealand [L.]	5 0 0	—	..	—Fully paid.
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	—	..	..Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—	..	..Fully paid.
100000	Montes Aureos (gold), Brazil [L.] [S.E.]	2 0 0	..	⅝ .. ¼ ¾	..Fully paid.
12000	Nerbudda Coal and Iron [L. £20] [6000 £5 pd., 6000 £3 pd.]	—	—	..	..Aug. 1865
50000	Nova Scotia (land and gold) [L. £2]	1 0 0	—	..	..Nov. 1862
10000	Otea (copper) New Zealand [L. £2]	1 0 0	—	..	..Mar. 1865
15000	Pachuca Silver Mining Company, Mexico [L. £1]	1 0 0	—	..	..June, 1863
6000	Peel River Land and Mineral [Limited]	100 0 0	—	..	..Stock.
23000	Quebrada (copper), Venezuela [L. £10]	8 10 0	..	.. 4½ 5⅛	..
10178	Rhenish Consolidated (lead) [6000 £5 paid, 4178 30s. paid.]	—	—	..	..Mar. 1865
50000	Rossa Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	—	..	..April, 1864
10000	San Roque (lead), Spain	5 0 0	—	..	..Fully paid.
60000	Santa Barbara (gold), Brazil [L. £1]	0 17 6	—	..	..Aug. 1865
20000	Scottish Australian Mining Company [L. £1]	0 17 6	—	..	..Feb. 1864
15000	South Europe Mining Company, Spain [L. £5]	5 0 0	—	..	..Fully paid.
30000	Val Antigoria (gold) [L. £2]	0 10 0	..	1½ .. ⅞ 1⅛	..
6000	Val Sassam (silver, copper, and lead) [L. £10]	4 0 0	—	..	..July, 1865
5000	Valgodemard Mining Company [L. £30]	15 0 0	—	..	..Mar. 1865
50000	Vallanzasca (gold), Italy [L. £1] [S.E.]	0 10 0	..	2¾ .. 2½ 2¾	..Oct. 1864
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—	..	..Fully paid.
20000	Washoe (gold) [10000 £5 paid, 10000 £3 paid]	—	—	..	..
1000	Western Africa Malachite (copper) [L.]	110 0 0	—	..	..Oct. 1865
12000	Wheal Ellen (copper), South Australia [L.]	5 0 0	—	..	..Fully paid.
80000	Worthing (copper, South Australia [L.] [S.E.]	1 0 0	—	1 .. ¾ 1	..Fully paid.
75000	Yorke Peninsula, South Australia [L.]	1 0 0	—	..	..Fully paid.

PROGRESSIVE MINES.

Shares	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
700	Aberdovey (sil.-lead), Merio	4 10 0	—	..	..Nov. 1864
1000	Alt-y-Crib (lead) [L.]	5 0 0	—	..	..Fully paid.
4000	Bedford Cons. (cop.), Tavistk.	2 11 6	—	..	..Feb. 1865
3200	Bodoi Aur (lead), Holywell	0 16 0	—	..	..May, 1865
500	Billins (lead)	80 0 0	—	..	..Fully paid.
6000	Boscawen (tin), Kenwyn	2 15 0	—	..	..Jan. 1865
5000	Bottle Hill (tin) Plympton	1 10 6	—	..	..Mar. 1865
30000	Bromlow (id.), Minsterley, Salop	1 0 0	—	..	..Fully paid.
200	Brynford Hall (lead), Flint	25 0 0	—	..	..May, 1865
500	Bryn Gwiog (lead), Flint	9 0 0	—	..	..June, 1864
1832	Bryntail (lead), Llanidloes	9 3 6	—	..	..July, 1865
30000	Caldbeck Fells (tin) [L. £2]	0 10 0	—	..	..
12000	Calstock Consols (copper)	2 10 0	—	..	..
1000	Camborne Consols (copper)	18 10 0	—	..	..Feb. 1864
4600	Camborne Vean & Wh. Francis	10 18 4	..	⅜ ..	..June, 1865
75000	Cambrian Consolid. (gd.) [L. £2]	1 0 0	—	..	..Aug. 1862
8000	Cape Cornwall (cop.), [L. £2 10s.]	1 15 0	—	..	..July, 1865
12000	Caradon & Phœnix Cons. [L. £1]	0 12 0	—	..	..April, 1865
914	Caradon Cons. (cop.), St. Cleer	29 13 6	—	..	..April, 1865
6000	Carn Camborne (cop.), Cambn.	1 17 0	..	1 .. 1 1¼	..July, 1865
6000	Carnglaze Untd. (tin), St. Just	0 10 0	—	..	..
2048	Carnyorth (tin), St. Just	4 15 0	—	..	..Dec. 1864
20000	Caryafort [3200 £2½ pd., 16800 £1¾ pd.]	0 5 0	—	..	..Mar. 1865
2500	Cefn Cilcen (ld.), Flint [L. £5]	2 12 0	—	..	..Mar. 1865
800	Cefn Cwm Brwyno (lead)	4 0 0	—	..	..Sept. 1864
2500	Central Minera (lead) [L. £5]	2 17 0	—	..	..May, 1865
3000	Chiverton (lead), Perranzabu.	7 0 0	..	8½ .. 8½ 8⅝	..Aug. 1865
3000	Chiverton Moor (lead)	3 10 0	—	..	..Aug. 1865
4000	Clara Unit., Ponterwyd [L. £3]	2 10 0	—	..	..July, 1865
3072	Cleer's Hill (tin), St. Stephen's	0 1 4	—	..	..July, 1864
5000	Cleveland (iron), [L. £20]	10 0 0	—	..	..Mar. 1865
787	Clijah & Wentworth (tin, cp.)	84 0 0	—	..	..July, 1865
3000	Clowance Wood (cop.) [L. £5]	4 0 0	—	..	3 3½ ..Sept. 1865
16000	Coolartra & Bond [L.] [5300 £1 pd., 10700 16s. pd.]	—	—	..	..Feb. 1865
50000	Connorree (cop., sulph.) [L.]	1 0 0	..	22s. .. 1⅛	..Fully paid.
6500	Cornish Clay and Tin [L.]	1 0 0	—	..	..Fully paid.
12000	Cornubia (tin) [L. £3] [4000 30s. pd., 8000 15s. pd.]	—	—	..	..
861	Crane (copper), Camborne	28 17 0	—	..	..June, 1865
30000	Crenver and Wh. Abraham [L.]	3 5 0	—	..	..June, 1865
12000	Crelake (cop.), Tavistock	2 13 0	—	..	..April, 1864
2500	Crowan Consols (cop.) Crowan	5 6 0	—	..	..July, 1865
8000	Crowan & Wendron (tin), [L. £1]	0 2 6	—	..	..
1428	Crowlwm (lead), Llanidloes	1 13 0	—	..	..Dec. 1864
6000	Cuddra (cop., tin), St. Austell	4 12 6	—	..	..Sept. 1865
10000	Cwmsymlog (sil.-ld.), [L. £5]	2 0 0	—	..	..May, 1864
35000	Dale (lead), North Stafford	1 0 0	—	..	..Fully paid.
1000	Darren (lead) [L.], Cardigan	9 4 0	—	..	..14½ 15 ..July, 1865
672	Ding Dong (tin), Gulval	44 10 6	—	..	..Dec. 1863
20000	Dolfrwynog (gold) [L. £1]	0 15 0	—	..	..June, 1864
1000	Eaglebrook (lead) [L. £20]	17 19 0	—	..	..Feb. 1865
1000	East Basset and Grylls (tin)	3 5 0	—	..	..July, 1865
6000	E. Bottle Hill (tin), Plympton	0 5 6	—	..	..May, 1865
2000	East Buller (copper)	2 0 0	—	..	..Mar. 1865
50000	East Cambrian (gold) [L. £1]	1 0 0	—	..	..Fully paid.
2000	East Chiverton (lead)	3 13 0	—	..	..Aug. 1865
2048	E. Falmouth (s.-id.), Kenwyn	5 0 6	—	..	..April, 1864
6000	E. Grenville (cop.), Camborne	2 16 0	..	2⅝ .. 2⅝ 2⅞	..Aug. 1865
6000	E. Gt. Work (tin), Breage [L. £5]	4 0 0	—	..	..Mar. 1865
4000	E. Gunnislake & S. Bedfd. (cop.)	8 8 6	—	..	¾ .. ..Aug. 1865
6145	East Jane (sil.-ld.), Cardinham	2 17 6	—	..	..April, 1865
6000	East Laxey (lead) [L. £3]	2 0 0	—	..	..July, 1864
1024	E. Margaret (tin), Uny Lelant	22 10 0	—	..	..Feb. 1865
8000	E. Polberro (tin) [L. £1] [4000 £1 pd. 4000 12s. 6d. pd.]	—	—	..	..Nov. 1864
3986	E. Providence (tin), Uny Lel.	4 11 9	—	..	..April, 1865
5000	East Tresavean	0 10 0	—	..	..May, 1865
6000	East Snaefell (lead) [L. £3]	2 0 0	—	..	..Nov. 1864
5610	East Seton (cop.), Camborne	0 10 0	—	..	..Dec. 1863
256	East Tolgus (copper), Redruth	92 0 0	—	..	..July, 1865
1024	E. Treskerby (cop.), Redruth	11 13 6	—	..	..June, 1865
1190	E. Wheal Agar (cop.), St. Cleer	12 17 0	—	..	..Jan. 1865
1300	E. Wheal Ellen (cop.) St. Agnes	3 5 0	—	..	..Dec. 1864
6000	E. Wh. Florence (cop.), Calling.	1 0 0	—	..	..
2048	East Wheal Grylls (tin, cop.)	2 15 0	—	..	..Jan. 1865
4000	E. Wh. Russell, Tavis. [S.E.]	10 8 0	..	3½ .. 2¾ 3	..June, 1865
6000	East Wheal Vor (tin and cop.)	5 0 0	—	..	..April, 1864
6144	Esther Und. (tin), Cardingham	0 6 3	—	..	..July, 1865
6000	Fostescue Consols	0 12 6	—	..	..
6000	Furze Hill Wood Cons., Buckl.	1 12 6	—	..	..July, 1865
10000	Fursdon (cop.), [L.] [5000 £1 10s. paid]	—	—	..	..Mar. 1865
1026	Garden, Morvah (copper)	5 7 9	—	..	..Aug. 1864
4096	Garlidna Untd. (tin), Wendron	5 1 7	—	..	..Sept. 1865
4000	Gawton (copper), Tavistock	2 17 6	..	2 .. 1½ 1¾	..June, 1865
6000	Gen. Min. Co. for Irel. (cop.)	4 0 0	—	..	..
5000	Glan Alun (lead), Mold [L.]	1 0 0	—	..	..Fully paid.
30000	Glasgow Caradon Con. (cp.) [L.]	1 0 0	—	..	..Fully paid.
6000	Godolphin Hill (tin), Breage	1 1 0	—	..	..June, 1865
2000	Golch Hill (lead), Flintshire	1 7 5	—	..	..Feb. 1865
6144	Gonamena (copper), St. Cleer	4 17 0	—	..	..May, 1865
2000	Goonzion (copper), St. Neot	1 17 6	—	..	..Dec. 1864
486	Gramb. & St. Aub. (cp.) [S.E.]	67 0 0	—	..	..Sept. 1865
4100	Great Brigan (cop.), Redruth	6 18 0	—	..	..May, 1865
4096	Great Caradon (cop.), St. Ive	2 18 0	—	..	..April, 1865
10000	Great Devon and Bedford [L.]	2 5 0	—	..	..July, 1865
3000	Gt. East Lovell (tin), Helston	1 0 0	—	..	..
5000	Great North Downs (copper)	4 13 0	..	2½ .. 2 2¼	..Sept. 1865
12500	Gt. No. Laxey (L. of Man) [L. £1]	0 10 0	..	2 .. 1½ 2	..Feb. 1865
6000	Gt. Retallack (sil.-ld., blende)	2 8 6	—	..	..July, 1865
6000	Great S. Chiverton (sil.-lead)	0 16 0	—	..	..July, 1865
2000	Great Tregune Consols (cop.)	0 5 0	—	..	..
13000	Great West Chiverton (lead)	1 0 0	—	..	..June, 1864
3313	Great Wheal Baddern (tin)	7 17 6	—	..	..June, 1864
6000	Gt. Wh. Busy (cop., tin), Ken.	14 9 6	..	3½ .. 3¼ 3½	..June, 1865
1798	Gt. Wh. Fortune (tin), Breage	22 12 0	—	..	..June, 1865
3072	Gt. Wh. Grylls (tin, copper)	1 7 6	—	..	..July, 1865
10000	Great Wh. Metal, Breage [L.]	2 0 0	—	..	..May, 1865
6400	Green Hurth (lead) [L. £1]	0 1 0	—	..	..
2500	Grit and Stapeley (lead), [L.]	10 0 0	—	..	..July, 1864
4000	Grylls Wheal Florence (tin)	1 2 6	—	..	..July, 1865
6068	Gwydyr Park Con., Llanrwst	1 10 6	—	..	..Sept. 1865
6000	Hallenbeagle (copper)	1 12 0	..	2¾ .. 2¼ 2⅜	..July, 1865
6400	Harwood (ld.), Durham [L. £1]	0 6 0	—	..	..Sept. 1864
5000	Havan (ld.)., Cardigan [L. £5]	4 5 0	—	..	..July, 1864
7219	Hawkmoor (tin, cop.) Calstock	3 9 0	—	..	..June, 1865
10000	HazelGrove (sil.-ld.) [L. £1] Flint